

REFERENCE COMPONENTS

PREAMPLIFIERS WITH PHONO STAGES

UPDATED MARCH 2009

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INTRODUCTION

There has been only slow progress with preamplifiers (with phono stages) in the last 15 years, caused obviously by a continually dwindling demand. The best preamplifier of the 1980's is still one of the very best 15 years later (though only with serious modifications). Most of the improvements have come about from the availability and use of superior passive parts (capacitors etc.).

Still, the 1990's gave us the first great high-gain preamplifier, and even the next best models are still superior to all but one of the best of the 1980's. The real problem now is the pathetic lack of choice compared to the past. Much of this "lack of choice" is caused by the mainstream audio magazines policy of ignoring small manufacturers who are producing some interesting designs, and at reasonable prices. Readers will have to mainly rely on their own efforts to search out these components. Any we find will be eventually discussed here.

Note- For Reference dedicated **phono stages**, see their own [separate file](#).

IMPORTANT NOTE ABOUT TUBES

The inclusion, and description, of each tube preamplifier (and tube phono stage and tube amplifier) assumes that high-quality tubes are being used in the signal path. That usually means New Old Stock tubes (NOS). This is especially true of "small signal" tubes, 12AX7 or 6SN7 etc.

There is some news (from **Vacuum Tube Valley**) that good small signal tubes are actually being made today, mainly in China, but I haven't been able to verify that yet. The bottom line here is that the owners of these components should **never** compromise their sonic performance with modern and inferior tubes. Good tubes are the best investment for long-term satisfaction.

Fortunately, there are excellent "output" tubes (6550, EL-34, 300B etc.) currently being manufactured, mainly in Eastern Europe and Russia, plus, very recently, China.

A WORD OF WARNING AND ADVICE

I recently received a depressing letter from a **reader** who purchased a **VTL Ultimate*** preamplifier, on my advice, only to see it break down after a few months, with the required repairs too expensive to be economical, at least for this reader, who is in the tube electronics business no less. So readers, please...

When you are buying an audio component **used**, especially an older tube unit from an unknown source, make certain there is some previous "feedback" or some resource if there are problems. Either that, or make sure the price you pay is low enough to allow you to still spend something to bring it up to top "stock" performance. (Modifications can come later.) Ideally, you should hear the component in your own system, and check it out personally, **BEFORE** the purchase. Fortunately, the nightmare this upset reader experienced is relatively rare, at least in our audio world, but always be careful before you make your commitment.

*This preamplifier is generally reliable, so I'm not trying to make an "example" out of it, but the reader informed me that the (VTL) factory won't be of any help (with schematics or parts lists), so be extra careful with it.

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CLASS A

AUDION PREMIER QUATTRO

The Audio Quattro is the finest stock preamplifier ever made. Its phono stage can accommodate only low output moving coils, and its line-stage is just a cathode follower without any gain. It has the benefits

of both simplicity of design and superb execution (with only 4 tubes in the entire signal path, a 4 chassis totally dual-mono construction and the power supplies use only polypropylene capacitors).

Once modified, this preamp has the extremely rare quality of both speed and precision along with a total sense of immediacy and completeness. It is extremely rare, so it is almost impossible to find used. The last retail price was **\$9,000 U.S.**

The only other preamp ever made that is in its class is the **Jadis JP-80** (and only if it is highly modified). Audion has a much less expensive model called the **DUAL**, which is the same basic design except it has two chassis and it's not hard-wired. I don't know anyone who has heard it, but it should be almost as good for a lot less money.

GOOD NEWS!- Audion has announced that it has re-started production of the Quattro. According to an e-mail from **Ray Lombardi** of **Ray of Sound**, the North American importer-distributor of Audion tube electronic products:

"the Audion Quattro preamplifier is available in 2 versions, a 2-chassis model, and a 4-chassis model. The 2-chassis model will retail for \$10,995, the 4-chassis model will retail for \$15,995."

There is also now a separate Audion phono-stage. One reader purchased one based on this website's reference designation of the full preamplifier. He is very happy with it. We have no experience with this model.

Further- No one in my **group** has had any direct experience with the most recent version of this preamplifier. I did receive a letter from a **reader** who did have some experience with a Quattro, and even compared it to another one of the finest preamplifiers ever made. This is what he wrote to me:

"I am in possession of the very first reincarnated Audion Premier Quattro Moving Coil and Line Level 4 Chassis Pre-Amplifier to reach these shores. It has the only two upgrades available: Silver point to point wiring and stepped attenuators. The chassis colors are black and silver as opposed to the standard dark blue and silver. I tested it in my system against my Michael Elliott SA-9 (Magnum Opus Version) and Magnum Opus Line Stage combination. The Audion Quattro is a very fine performer. However, in my system, as it is now set up, I prefer the two Opus One Units."

After I requested further information, he sent me this **second** letter:

"There was break-in time put on the unit at the factory and at the importer. We tried the unit with the stock tubes as well as with two different sets of NOS E88CC - Telefunken and Siemen. Briefly, the Audion had shortcomings compared to the Opus in bass energy below 60 Hz, and with dynamics, along with less extended upper frequency range. For the most part, I feel that the huge tube power supplies of the Magnum Opus, compared to the solid state power supplies of the Audion probably accounts for most

of the differences. I will send you a much more detailed report later. The system includes the big Sound Labs, Walker turntable with Koetsu Onyx Platinum, and a special pair of Viva Auroras (Special Transformers through-out, transformer input, and 845/211 tubes) with Silent Source Cables."

While I am not in a position to verify his observations, I also have no legitimate reason to challenge either his competency or his veracity. Of course, the Audion is a currently available component, while the ultra-rare Magnum Opus model (a "dressed-up SA-9" according to Michael Elliott) must be found used.

These two preamplifiers are most likely the two finest that can be purchased "ready to use". However, based on my experiences, I still strongly believe that **neither** of them can equal a heavily modified **Jadis JP-80** with an **Expressive Technology SU-1 Transformer** in its ability to capture the most basic essences of music, though they both will be superior to the Jadis/ET combo in other sonic parameters which are less important to me. **7/03**

AUDION PREMIER QUATTRO (LATEST VERSION-UPDATE FEBRUARY 2007)

I have some important news concerning this Reference preamplifier. The price for a new **Quattro*** is now **\$ 16,000****, but there is also a version with all **V-Cap Teflon capacitors** in the signal-path. This option costs an extra **\$ 1,500**** (parts and labor). Needless to say, I highly recommend anyone purchasing this unit to also add the V-Cap modification.

I have heard this new model, with the V-Cap modification, for many hours at an **associate's** home. This same associate also had the **older** Quattro, though it was heavily modified, including **Rel Cap Teflon** capacitors in the signal path. We both agree that this new model is noticeably superior in every way, even beyond the improvement obviously guaranteed just by the change in the coupling capacitors. At this time, we also both agree that this is the finest preamplifier we are aware of that you can purchase **new*****, at **any** price. Accordingly, it is the only preamplifier now in "**Class A**" that is currently being manufactured.

Further- I was just informed by one of my **associates**, who actually owns the first Audion Quattro built with V-Caps, that he also had the stock **volume controls** replaced with those made by **Gold Point**, using **Vishay** resistors. They are **\$ 1,500 for the pair**, but he claims that are absolutely necessary if you want to hear the full potential of this design.

*This has **4 chassis**. There is also a **2 chassis** version, which sells for **\$ 11,000**, but we haven't heard it. The cost for the V-Cap Teflon modification is also \$ 1,500.

For further details, contact **Ray Lombardi, of **Ray of Sound**, who is the North American importer of **Audion**. The website is: **www.rayofsound.com**

***The one other Class A Preamplifier is a used **Jadis JP-80**, with extensive modifications, and either a **Bent Audio Silver**, or an **Expressive Technologies SU-1**, moving coil transformer as a step-up.

JADIS JP-80 SERIES (USED AND EXTREMELY MODIFIED ONLY)

The Jadis JP-80 is the only other full preamplifier ever made that is in the class of the Audion. However, there is a big difference, because the Jadis preamps require both **extensive** modifications and the **Expressive Technology SU-1** to equal the **Audion Quattro's** performance when amplifying a phono signal. On the other hand, there are more JP-80s out there so they can be purchased used for a smaller initial expenditure.

Eventually, with the modifications and the **SU-1**, you will have an investment which will be about the same as the Quattro, with its own much simpler and cheaper modifications.

Which one is better?

Each model has small theoretical and practical advantages over the other. There can't be significant differences considering that both units are superb in every area of musical reproduction. However, based on extensive listening sessions with the Audion, in an associate's system that I am very familiar with, I am now certain that the Audion does not equal the Jadis in retaining low-level musical information. The Audion does have sonic advantages in other areas, but to me they are less important. So I still feel that the (modified) Jadis/ET combination is the ultimate way to go, as impractical as they are now to both find and then build.

What about the JP-80 "stock"? It would be, most likely, a lower "Class B" preamp in performance, and that ranking assumes that the (poor) MC stage was not being utilized.

Unless you have no choice, you should generally avoid the newer JP-80MC, since you won't be using their mediocre moving-coil stage. You will need all the money you saved to gut and modify your JP-80 after the purchase. The most you should ever spend on any used JP-80, including the MC, is around **\$7,000**, though this number may change depending on supply and demand.

Power Supply Variations

Some JP-80s have no tubes in the power supply. Jadis took them out for a couple of years beginning around 1990. The preamplifier is faster and more precise without them, but it's also "drier". It's a very small difference, but it's still audible. They went back to using tubes after, I assume, complaints from customers and dealers.

JP-80 Modifications

I have received a number of requests to provide the details of the modifications I made to my reference JP-80. I have now began a [Modification File](#). It will take some time to fully complete, but the most fundamental and noticeable modifications have now been posted.

The (Top-of-the-line) Jadis JP-200?

The **JP-80** is not their "top of the line" preamplifier. Jadis also makes the **JP-200**, which is the most expensive preamplifier I know of at **\$36,000**. It's a **four** chassis design, and has **9 (EF-86) tubes per channel**; 3 each for the moving-coil, RIAA phono and line stages respectively. It looks like two JP-80's, one per channel. Because of its unusually large size, it can be very difficult to position it within typical cabinets. There could also be cable and grounding problems.

Then there are the sonics. Because it is quite rare, not many people have actually heard this component, but we are very lucky in this instance. Back in the early 1990's, just before I bought the Expressive Technology SU-1 Transformer, and while my own JP-80 was still almost pure stock, a good friend of mine purchased the JP-200 (he received a great deal, but he still paid big money).

The "Big Shootout"

He soon came over to my place to find out how much better it was than the JP-80. A couple of his friends tagged along, and a couple of my closest audiophile friends were also there. This was a "big event" at the time and a large number of people wanted to attend, but 6 audiophiles was the maximum I would allow in my room at one time (to avoid a "circus" atmosphere).

We ended up spending the entire afternoon comparing the two models. First we played my unit, since it was already "hooked up". Then we took everything apart and installed the JP-200. Then it was back to the JP-80 and then one last listen to the JP-200 (for final confirmation). The system, as I remember it was: **Goldmund Studio modified/SME V, Dynavector XX-1*, Jadis JA-80's highly modified, Wilson Watts II modified, Entec top-of-the-line SW-2 subwoofers.**

*This was an excellent high-output moving coil cartridge. The unique moving-coil stage of the JP-200 was not employed. If it had, the comparison would have been unfair and useless. Only the basic phono and line stages were used and compared.

Fortunately, there was total unanimity in what we all heard and what I now describe:

The JP-200 was slightly superior in **3** sonic elements. There was a small improvement in image size and focus, bass extension and dynamic shading. In the remaining sonic areas, the two preamplifiers were either equal or the JP-80 even slightly superior to the JP-200. This latter result surprised all of us, but we speculated that it was due to the very modest (at the time) **modifications** that I had already made to the JP-80. (We were trying to be kind to the disappointed owner of the JP-200 by this time.)

The bottom line...

The JP-200 is not worth the extra money. In fact, the **owner**** put it up for sale immediately after this comparison. There were some enhancements you might pay a few hundred dollars for, not \$10,000 and probably more. As a rule, component cost is not a factor in this class, but paying that much more for such a minor improvement isn't reasonable by any sane standards. The impracticality of this four chassis design is another negative factor that must also not be forgotten.

In simple terms; as superb as it was, the JP-200 was still a major disappointment.

** The owner of the JP-200 sold the preamplifier within a year, but this incident permanently changed him. He completely lost his interest in purchasing "crazy-priced" components and started looking for "value" instead. It was the English poet **William Blake** who wrote that: "The road of excess leads to the palace of wisdom".

The Jadis JP-30 Preamplifier

I was able to hear the **JP-30** extensively, during a period around **1990** (with a distributor's loan). I was NOT impressed with it at all. The **Class C** preamplifiers below, such as the **MFA Magus** and **Audible Illusions Modulas II**, were noticeably superior to the Jadis, even when they were "stock". The build quality wasn't that special either. The sound reminded me of the cheapest **Conrad Johnson** preamplifiers (veiled, slow and distorted), and the JP-30 was still relatively expensive. It was a major disappointment, and I felt that the component was not worthy of the Jadis "name". (I have not heard the more recent JP-30MC.)

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CLASS B

DOGE 8

A **few** of my most experienced **associates** have auditioned this model, and in-depth. Their standards, and the revealing system they used to evaluate this phono stage, are at the highest level. Direct comparisons were even made with a modified original, and the most recent, ("**Class A**") **Audion Quattro** (see above). I have not heard this unit myself. There is some minor editing and my **bold**:

"The Doge is built in **China**, but the quality of construction and parts used would put many North American components to shame. This preamp uses very high quality transformers, circuit boards, and resistors. The caps could be improved, as they are low end metallized polypropylenes, but they are pretty

much to be expected in a unit at this price point (**\$ 1,199 US**). The preamp weighs in excess of **30 lbs**, and the cosmetics are very pleasing.

What features can you get in a well made \$ 1,200 tube preamp? For starters: **4 -12AT7s** in the line stage and **4- 12AX7s** in the phono.* The volume is remote controllable. The Phono has **MC** capability as well as 2 settings for cartridge impedance. Outputs include **RCA and XLR**. It's hard to ask for much more.

The sound- Let's start with the **line stage**. Magnificent sums it up. This line stage will compete with any in models costing **\$ 5,000**. It is that good. Not only is it highly transparent and pure, this thing kicks ass. The dynamics, the weight and impact are staggering. If your system is in need of an adrenaline boost, the Doge is the remedy. The Doge line stage makes listening to digital viscerally thrilling in a way a live concert does. Having the remote volume control is a treat, since so many CDs are mastered at varying output levels. It is nice to be able to adjust volume while you sit on your keester. If the Doge was only a line stage preamp, it would be a bargain at its selling price.

Phono- While the phono section of the Doge (both MM/MC) is very good, and certainly an overachiever at its price, it does not measure up to the stellar performance of the line stage. The sound on LPs, still in the league of competing \$ 3,000-\$ 4,000 units, exhibits audible flaws. The unit in MC (a combination of high gain **JFETS**, in addition to the 4 - 12AX7s) is a little noisy with low output MCs. It could and should be quieter.

More importantly, while vinyl reproduction is very clean, highly resolved and dynamic, with excellent reproduction of the frequency extremes, there is a slight thinning out of harmonics in the midrange. Voices are rendered a tad leaner than they should. A little more body is required. Additionally, the midbass could be more weighty and impactful.

I attribute the sonic anomalies to the transistors in the high gain MC stage. The Doge MC stage does take on a solid state quality. If preferences lie with good solid state sound, the Doge will definitely be satisfying. If your preferences include **Conrad-Johnson** or **Joule Electra** musical presentations (meaning soft, warm and forgiving), the Doge is not the unit to tickle your fancy.

A suggestion for those who are not transistor fans would be to obtain a high quality moving coil transformer and use it with the MM section of the Doge. That combination could be a killer.

Bottom Line- For \$1,200, the Doge offers tremendous value. The quality of construction, variety of user features and most importantly, sonic performance is unavailable anywhere near its selling price. A great buy."

*To obtain the sonics described, the stock Chinese tubes must be upgraded to either NOS or reissued Mullards.

Personal Note- I was also informed by my **associate** that, sadly, the Doge 8 can **not** be **modified** (unless it is completely taken apart, which will take many, many hours of tedious, difficult and highly detailed work). A real shame.

ATMA-SPHERE MP-1 MK. II

This preamplifier should have been listed years ago, but it was another oversight on my part. I have **not** heard this component myself, but one of my **associates** has considerable experience with it, and he was greatly impressed. Since he has extensive experience with virtually every preamplifier discussed within this file, and ALL of the top preamps, that is saying quite a lot.

While he still hasn't given me a detailed description, he did emphasize that the Atma-sphere is able to convey a considerable amount of musical information; has an extended frequency response and that it also sounds "very natural". It is definitely one of the finest full preamplifiers currently available. Unfortunately, he also informed me that purchasers should be aware of two potential problem areas;

Caveat 1- The Atma-sphere is prone to noise unless you get the proper tubes, which means you must do some "tube-rolling".

Caveat 2- Early models supposedly had some reliability problems, which may have been fixed, but he's not certain. Check out websites like **Tube Asylum** and **Audiogon** for the latest information and contacts. The manufacturer has a website, which can be found in the **Links** File. A **Google** search may also be helpful.

COUNTERPOINT SA-9/MAGNUM OPUS

A detailed description of these units are in the **Phono Stage** file. They are also here because they can be used as phono only preamplifiers.

CAVEAT: Their stock "volume control" does not have fine adjustments.

MANLEY REFERENCE & CONTROL MASTER

These are both full preamplifiers with line stages. Both are superb, with the Reference model slightly superior with its advantage of a separate and larger power supply. These units, as well as the **SA-9**, subtract some low-level information and also lack some immediacy compared to the Class A models. Both the Control Master and the Reference have a built-in moving coil transformer; it's very good, but not close to the **Expressive**.

FURTHER- Manley now has released a phono stage that can be used as a full preamplifier in a simple system. It is called **The Steelhead**. Preliminary listening was very impressive. Readers should seriously

consider this unit before committing to any preamplifier.

VTL "THE ULTIMATE"

The VTL is an excellent preamplifier stock and superb after modifications and replacement of tubes. It is totally dual mono and has enough gain for most moving coils. This was VTL's greatest achievement in preamplifiers. The line stage is also outstanding. It has no major weakness. The sound is a little warmer than pure neutral, but it is still less colored than most **Conrad Johnson** designs. The bargain in this class. The Ultimate is also well built, but it is no "beauty queen". This preamplifier is no longer made. The replacements were not quite as good.

Caveat- I've been told that some of the Ultimate preamplifiers had "reliability problems", despite the fact that it is relatively "well built". They should be checked out carefully, and also auditioned (by a trusted 3rd party if necessary), before the purchase is made.

FURTHER: I have recently heard some good things about one of the replacements for The Ultimate. It is the **VTL Model 5.5**. It is very well made, especially for the money, with an exceptional power supply which includes a large number of **MIT** polypropylene capacitors. The only serious sonic weakness is the (somewhat noisy) moving-coil stage, which can be bypassed if necessary. This model should be checked out since its price is quite reasonable.

MFA LUMINESCENCE (MODIFIED ONLY)

This preamplifier (the "Lumi") became a cult item even while it was still being manufactured, more than 10 years ago now. It had unique sound characteristics and was phenomenally well built, especially for the money.

The Luminescence is an "all-out" design with a huge, separate power supply that has at least **four** large transformers, chokes, plus (2 or 4 tube) regulation. The actual preamplifier is hardwired and uses **octal tubes** throughout, both rarities at the time it came out, and even today. (Earlier versions of this preamplifier, with less than 4 transformers, do not qualify for this class, but are still excellent.)

The Luminescence is full-bodied, with a very large soundstage and it doesn't fall apart when the music gets loud. It may have as much low-level musical information as any other preamplifier in existence, with the one exception of the Jadis JP-80 series. These rare and valuable sonic strengths are the reasons this preamplifier is in such constant demand. However...

It is not particularly fast, neutral, precise or immediate sounding, but it can be noticeably improved in all those areas with modifications. These modifications; improved capacitors, better **NOS** octal tubes, removing RFI filters etc., are required for this preamplifier to reach its full sonic (Class B) potential.

The Luminescence's sound is so unique that it should always be auditioned before the purchase by a first time listener. My associates are split on its performance, some love it and some dislike it. I lean closer to the "love it" position.

The MFA Luminescence has proven to be a very reliable design.

MFA Reference- This recent model was even more "all-out" than the Luminescence. From what we have been told, and what we have read, the sound and character is very similar to its predecessor, but none of us has properly heard it in conditions which would allow us to make a serious evaluation or even an opinion.

Further- A reader, who has extensive experience with the Luminescence, recently sent me this letter, which included some (edited) observations that I felt should be shared:

"Some comments on the **MFA Reference**. It is of completely different design from the Lumi, it uses regular tubes (not octal base), it uses solid state regulation throughout (which rumors say was designed by John Curl). It is much quieter than the Lumi, a lot drier, cleaner, sound SOMEWHAT similar in general character to the Lumi. Definitely faster. **Scott Frankland's** personal favorite.

My Lumi C, which was severely modified with solid state regulation, sounds somewhat similar to Reference but is noisier and still not as clean. The Reference was used by somebody in **The Absolute Sound** circa 1990, or thereabout, as its reference at some point, but it didn't stay in production for long. They said it definitely sounded darker than the CAT which, in my opinion, is easy to do for any preamp. It played any MC above .15 mV with ease. Everybody I know prefers the Lumi over it, that is to say the Reference is a more "regular" sounding preamp. The last time I was in communication with Scott, he had enough parts left to build one, if anyone's interested." (8/03)

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CLASS C

CONVERGENT AUDIO TECHNOLOGY (CAT) SL-1 (USED ONLY)

These models are all very good to excellent. There's a large variety of them out there since the manufacturer has been around now for **20 years**. The more recent models are a little better, but the most recent model, the **Ultimate**, is both overrated and overpriced, in our experience. (There are plenty of people who disagree with that statement.)

I seriously advise comparing the Ultimate to the above Reference (Class B) models; from Manley and VTL (and don't forget the Hovland HP-100), before making any serious commitment. At the same time, at their used prices, the older models can be a much better value than virtually any new preamp for the

same price. They have high gain, enough for most (but not all) MC cartridges.

The "sound" of the CAT is almost the exact **opposite** of the **Luminescence**, and should also be auditioned before the purchase. This is another "love it or hate it" component, literally. For many audiophiles, these preamps will be much better performers than the other preamplifiers in this class, with the exceptions of the ARC SP-10 and SP-11, meaning they should really be in Class B. Personally, I'm torn about this myself, but they're here just because I'm being conservative and cautious, maybe overly so.

Caveat- The volume control on many of the **older** CATs doesn't allow a soft volume, either on phono or line sources. They tend to get very loud very fast, and sometimes without recourse for the listener.

AUDIO RESEARCH CORP. SP-6, SP-8, SP-10 & SP-11

These preamplifiers are the best ARC made during a 10 year period; from the late 1970's to late 1980's. That was their "Golden Age". Personally, I (or my store) owned every single model, with the single exception of the SP-10. Sadly, ARC hasn't been the same since then. The big change for them started with the SP-11, which sold for more than the SP-10, despite being cheaper to build. If anything, the ratio of their retail price to their manufacturing cost has appeared to grow even worse over time.

Their newer models are now overpriced, much cheaper in construction and most of them have pitiful power supplies. None of them, except the grossly overpriced "Reference" models, can match these in overall performance, and even the new "References" do not equal the best of the earlier models in overall naturalness, at least according to the observations of my associates. (Avoid the overrated "hybrid" models, the SP-9 and SP-14. Their power supplies are a disgrace for the price.)

At their used prices, the Reference models above are all bargains compared to units made today, not only in sound quality, but also in build quality. These can, and should, all be modified because their passive parts are now obsolete, especially their coupling capacitors. This is equally true for all the other preamplifiers within this class.

Among all the different models, the SP-10 is the most preferable, because it has the greatest potential, though the SP-11 will still have some sonic advantages. Of the lower-gain models, the SP-8 series is generally preferable to the SP-6 series.

ARC also made preamplifiers in the 1970's, the **SP-3** series and the solid-state **SP-4**. They were very well made for their day, but their sonics (the very best of their time) are not up to standards of their later models (or today). However, their phono-stages may still be excellent on their own.

COUNTERPOINT SA-5 SERIES

These were excellent preamps made in the late 1980's and early 1990's. Both have separate power supplies and combine a lot of detail with good low-level retrieval. It has very neutral sound with excellent speed and precision. Their gain is higher than the **SP-6 and SP-8**, but still less than either the **SP-10 or -11**.

MFA MAGUS

The Magus is one of the best preamplifiers ever made for the money. It is even a better value used. It has relatively high-gain and even has a separate power supply.

It is warmer and darker than pure neutral, and it also blunts transients, but it can be improved in the areas of neutrality, transparency and speed with better coupling capacitors. The RIAA curve can also be changed, but that requires reliable information from an expert.

AUDIBLE ILLUSIONS MODULUS II & III (USED)

These are also excellent units. There must be around 5 or 6 different models, and all of them are References. They are similar in character and general performance to the best (low-gain, all tube) preamplifiers from **Audio Research**, though not quite as clean, extended or dynamic.

Modulus Vs Magus

These are two of the three finest preamplifiers ever made for the money (the other is the **Precision Fidelity C-7**). How do they compare? The Modulus is cleaner, more neutral and has greater detail than the **Magus**, but it's not quite as warm and full bodied. It also doesn't have the high gain of the Magus. However, the Modulus is also a little better built, and, unlike the Magus, Audible Illusions is still in business.

Modulus II Vs Modulus III

The III is a little better than the finest of the II series, with its separate power supply and superior passive parts, but it is not worth the large premium you will pay if you buy it new at full retail price. It's a lot smarter to buy a **used CAT** of any vintage than a **new** Modulus III. However, a **used** III can be a **great** deal.

If you must buy brand new, the III may still be the finest preamplifier, with phono, available today for the money.

Audible Illusions is even coming out with some new components and there is now a **link** to their website in the Links section.

AUDIBLE ILLUSIONS URANUS I & II

These were "all-out" preamplifiers manufactured in the **early 1980's** (before I was an Audible Illusions dealer.) I later had some experience with them when my former store took them in as trade-ins. (I had a very liberal trade-in policy back then, particularly for **tube** equipment.) By the time I heard them for myself, they were long out of production.

The only difference I know of between the Model I and Model II, was that the II had a **12AU7** as the output tube, and the I had a **6DJ8**. The price was increased with the II also, of course. (I never compared them directly, but I assume the II has **some** advantage.)

They had a good build-quality and the sound was excellent on both of them. They were very natural and full-bodied. The frequency extremes weren't the best, but this was a common problem back then, and even today, with most tube equipment. They were also clean and detailed. I even remember being reluctant to resell them and considered keeping them for myself, which is about the highest compliment I could give.

I haven't seen one of these for a while now, and I have no idea what they would go for used. They do need to be **modified** with the best capacitors, both in the signal path and power supply. Their gain is just average, meaning you will require a step-up for a typical low-output moving coil.

PRECISION FIDELITY C-7 (LATER MODELS)

I sold this model when my store opened back in 1981. This is a "**Classic Preamplifier**", with a design far ahead of not only its own time, but even up to today. In fact, our current audio market is begging for an updated version of the C-7.

The C-7 was essentially a high quality (tube) phono-stage with two volume controls, a couple of extra (passive) inputs and **no** line-stage. This is "the dream design" of today's audiophiles who have phono-centric systems, like me. (My own preamplifier, the **Jadis JP-80**, was heavily modified to copy the basic design of the C-7.)

It's been some time since I heard one of them, but I remember their sheer natural quality and the cleanness and quietness that is consistent with no line-stage. The people who bought them, if they could live with the low-gain, loved them. (I'd love to hear a modified version, with the best caps available today. I would love even more to hear an all-out modern version of this design.)

I remember that the original C-7 had some design problems that translated into sonic problems, so look for the "**A**" or "**Revised**" versions. (I can **not** provide the schematics to make these revisions.) The C-7 should be modified with better capacitors, just like all the other preamplifiers from this era. They also require a high quality step-up device for low-output moving coils.

Recent- One reader just purchased a C-7 based on the above advice. His take:

"...soundwise - Wow! Lumi is taking a long rest. This thing sounds a bit dark (like most passives in my system, probably the amp), but it is so dynamic, immediate, transparent, and not greasy or euphonic or juicy. I'd venture to say it is rather accurate. Of all medium priced preamps that I've tried, and I've had many, including many Bruce Moore designs, this one is by far the best sounding, with great MM phono. It beats Magus by a wide margin and phono is a lot quieter (uses two solid state regulators). Thanks for a great suggestion..."

Bottom Line- If I was on "a strict budget" for a preamplifier, and with the choice of **ANY model ever made**, the C-7 (modified) would be **my first choice**.

Other Precision Fidelity Models

Precision Fidelity C-8- This preamplifier was introduced at a later time, along with a few revisions. I sold a number of them. They had higher gain, but they used transistors, so a sonic price was paid. They also had a linestage. They are still "good", but they don't have the obvious natural musical qualities of the C-7.

Precision Fidelity C-9- This was their "all-out" preamplifier. It had high-gain, more than the competition, and enough for a typical moving-coil cartridge, but it used only tubes. These were very rare. I had just one in my store and, after I sold it, I wasn't able to replace it.

This was the finest high-gain preamplifier of its day. It was better than the CJ Premier II and III and the Audio Research models of its day, but it didn't receive any "hype" from the audio magazines. It was very dynamic, full-bodied, transparent and detailed. The extremes were also better than the (tube) competition. It had a somewhat "complicated" circuit, with something like **9** tubes, if I remember correctly. As a reader reminded me, the high-gain phono stage also had more noticeable tube noise than its competitors.

It had a lot of components within its single chassis, and it ran hotter than average. My model had some problems that were easily repaired, but I have no information concerning its long-term reliability. Of course, if you can find one that is still working, it must have passed that test also.

This preamplifier should be in Class C or maybe even Class B, but I don't know how many of them were actually made, and I don't want to inspire a useless wild-goose-chase. So it will stay here, for now.

QUICKSILVER

I was a Quicksilver dealer in the 1980's. Most of my experiences were with their power amplifiers, but I also had their preamplifier in the store for an extended period of time. The owner/designer, **Mike**

Sanders, who resembles Charlton Heston, visited me on several occasions (his wife came from Toronto).

The Quicksilver, there was only one model, was impressive from the first time we played it. It was clean, quiet and both natural and detailed. The gain is average, so a step-up (they also manufacture a transformer) is required with typical moving-coil pickups. In general, it was at least "good" in every sonic parameter, though not "exceptional" in any. The build quality was also excellent.

This model is preferable, overall, to both the Modulus II and the Magus. Compared to the equivalent ARC models (the SP-6/8 series), I would say it was a little more natural "stock", while they had the edge in outer definition and in the frequency extremes. The Counterpoint 5.1 outperformed it.

Quicksilver has made a line-stage and separate phono-stage since the mid 1990's, but I have no experience with these models.

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Other Interesting Preamplifiers

HOVLAND HP-100-UNDER CONSIDERATION- This same company was originally well known for its superb and expensive capacitors. This preamplifier has not been heard by my group in a controlled setting, but I have heard and read enough about it to recommend auditioning it. It was designed to retrieve the subtle musical information that I most value. It is also well made and obviously uses top quality passive parts, including the volume control and the selector switch. They have a moving coil transformer too, but we have no word on that either yet. A final determination will be made after it is compared to the others in this class.

Further- Someone in our extended group has properly auditioned the "linestage" version of the Hovland. He felt it was **superior** to the Manley Control Master **Linestage**. He was so impressed that he purchased the Hovland. The phono stage is still a total mystery to us.

PARAGON- This company came out with a few very interesting preamplifiers during the later 1970's. I have fondly remembered experiences with them.

According to former Paragon owner, **Mark Deneen**, the original **Model 10**, designed by "consulting engineer" **Bruce Moore**, was "unmanufacturable" and only 50 were ever made. I never heard one, but I did hear, and even owned, the replacements, the **Model 12** and **12A**. They were excellent in their day, maybe the best available, with full-bodied sound, spatial information and good retrieval of decay. That was breakthrough performance at the time.

Even more intriguing was their budget model, the **System "E"**. It had a simpler circuit, with no tone controls (unusual at the time), and a large unregulated power supply. Paragon's own (in-house) listeners

felt it was actually better than their more expensive models, but only when driving **tube** amplifiers. I'd love to hear one today, but modified with Teflon coupling caps.

Further- Because of their age, caution must be used when checking their condition. They should also be modified. All of the Paragon preamplifiers, with the one exception of the Model 10, are in the **Reference Phono Stages**.

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READERS LETTERS

CAVEAT- Please be advised that the readers' letters posted on this site are solely the opinion of that reader and may not necessarily represent or reflect the opinions of Arthur Salvatore or High-End Audio. These letters furthermore, are not to be taken as being endorsed by Arthur Salvatore or High-End Audio. They are posted because they may be edifying, thought provoking or entertaining.

PRECISION FIDELITY C-7 PREAMPLIFIER- This preamplifier is my choice for the "best preamplifier ever made for the money". It had a brilliant minimalist design, ahead of its time, and decent execution for its day. There are several versions of it, and a **reader** sent me a letter with some pertinent information about them:

"In your article (on the C-7) you stated that '[you] didn't know if the **C-7** could be updated to the **C-7A**, or **C-7 Revised**'.

Just to let you know, yes they can. Modifying a C-7A to a C-7 revised is a minor modification, and would take an audio engineer (or electronics tech) with a schematic and the right parts about 1 hour to do. However, modifying a C-7 to a C-7 revised is a little more time consuming, but is still relatively easy and would only take about 4 hours to do the complete job.

Just to let you know, from the basic C-7, the C-7A modifications are primarily updates to the power supply section of the preamp. The C-7 to C-7 revised is a more involved, because it has a greater involvement in upgrading the power supply; some very slight modifications to the phono stage (to increase gain); and, additional modifications to the line stage. Anyone with a complete set of schematics for all 3 versions of the preamp (which I am lucky to have) could easily do the modifications."

MFA LUMINESCENCE PREAMPLIFIER- THE DIFFERENT VERSIONS

A **reader** sent me a letter asking if I knew which version, if any, of the Luminescence preamplifiers he owned. I felt it was a very early model, but advised him to contact **Scott Frankland**, who would be the one person who would know with certainty. He did, and this is Frankland's (edited) reply. There is an important personal note at the end. My **bold**:

"The Luminescence preamp began as a streamlined version of our **3-chassis Venusian** preamp. Both models were specifically designed around **octal-base** triodes. Venusians were built from the **late 70's til the mid-80's**. Lumi's were built from **1983 to 1990** (see attached revision key*).

What you have is a transition model prototype, probably built in the mid-80's, and intended to be a bridge out of the octal-tube quandry. At a certain point we began to have difficulty finding adequate stocks of **5691** octal triodes (these were needed to keep the noise under control in the Lumi phono stage). We then tried for some years to effect a "Lumi" using **9-pin** tubes. Yours was one of the many attempts. At a certain point we realized that we could never duplicate the sound of the Lumi using 9-pin tubes, so we stopped trying. We set out instead to produce a 9-pin preamp that would simply stand on its own merits. The result was the **MC Reference**, which was produced in small numbers during the early 90's.

As always, **I service and upgrade all MFA equipment**. I just don't advertise the fact. Word of mouth is usually sufficient to find me. Please let me know if I can be of further assistance..."

Scott Frankland
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audioeng@pacbell.net

Personal Note- I have a copy of the **Luminescence "revision key" (a PDF file)***, which can be sent to readers upon request.

Some Counterpoint Upgrades Discontinued

A **reader** just sent me an email with some sad news. I would check out Elliot's website (**www.altavistaaudio.com/**) for the relevant details. While relatively expensive, the owners I've heard from have all been very happy with their upgrades. Some minor editing and my **bold**:

"I guess it's the end of an era, because it seems **Mike Elliot** is discontinuing at least some of his most popular upgrades (**SA-9, SA-11, SA-4**), which has gone into effect this month. I remember that you mention his upgrades on your site so I just thought I would update you on this. I imagine this has something to do with his new **Aria** amps and preamp..." (5/08)

Canary Preamplifiers

A **reader** sent me this letter concerning the Canary preamplifiers, which neither I, nor any of my associates, have any serious experience with (in contrast to their 300B based power amplifiers). There's some minor editing and my **bold**:

"...**www.high-endaudio.com** is one of the few sites that has reviewers mentioning products from the boutique manufacturer **Canary Audio**. I guess the purpose of me writing this is to request that you relay this info to the person who has the **903s** driving the **Reference Ones** that he is not doing the Reference Ones any justice with the 903s.

I happened to have briefly owned **CA-301** (someone borrowed it and blew it up), **CA-309** (did not have quite enough juice to power the **Eidolons**), and I am currently using a highly modified (yours truly) **CA-801SE**...

The 801 circuit wise is very similar to the 903 except for chassis count and tube rectification. They are both based on the **Wada Shigeru** mod (SRPP instead of single triode follower) of the **Marantz 7**. The CA801SE handily displaced 3 preamps I had in my system (was in an evaluation frenzy at the time): My trusty **Audio Research Reference 1** with **Auricaps** (huge soundstage buy no emotion at all), **SP10 II** (has its idiosyncrasies), and **Cary SLP98P** (gasses out and becomes muddy when challenged by complex passages).

After prolonged listening however, I find the Canary preamp lacking in textural richness of the mid highs, as evidenced by violin music. Violins are never steely or muffled as played through a lot of sub-par preamps but the Canary lacks richness and flavor despite various tube-rolling attempts. I am almost tempted to use the worlds constricted and compressed but that might be too negative. A friend who uses a CA903 setup just sold his because of the same reason.

This stock CA801SE also went to a friend's place with CA309 driving **Genesis ribbon towers** with the same results: Completely slaughtered by an **MFA Lumi**.

So I decided to roll up my sleeves and start swapping things out.

* First out goes the 1st 12AX7s interstage coupling cap, in comes a **Jensen 0.01 copper oil**.

* Then the 12AU7 (SRPP) stage coupling is swapped with a **V-Cap reference** (a bit of a waste of \$\$\$ but thats what I have)

* Then the Output caps with **4.7uF Mundorf Silver oil**

* NFB loop DC blocker with **4.7uF Mundorf M Supreme**

Then I checked the NFB loop and thought it could use some reduction in the amount of NFB so out goes the Feedback loop **25k** resistor in favor of a **37k** one. The sound became a lot more relaxed but at the expense of some bass oomph disappearing. Still not enough improvement I think.

So, moving on to high Voltage:

The **Sprague atom** decouplers are swapped with **ASC** and **Sprague Oil cans**, that warmed up the sound quite a bit. Finally the violins are passable. I noticed that the biggest difference between the 801SE and the 903 is the power supply where the latter uses a tube rectifier, so I swapped out the **1N54XX diodes** with **Fairchild Stealth Hexfreds**.

Just when I was getting pretty satisfied with the preamp, and think that it's getting close to the sound of an MFA Lumi (I must confess...I wish!), I got the chance to borrow the new **Canary 906** to play in my system.

The 906 is somewhat like the Lumi line stage (2 **6SN7** per channel), but I think the similarity is limited to tube config only. I think the circuit is quite different. The unit I borrowed was supposedly fresh off the production line. When I turned it on and played **Midori-Sibelius** violin concerto I was shocked. It **does** sound like my friend's highly modified Lumi! Good 6SN7 based preamps are not easy to make. While they are almost never thin or brittle, I have heard quite a few of them that are either noisy or easily "run out of gas" and convey a blurred soundstage when transients or complex passages are played, momentarily morphing from Hi definition (sorry to have borrowed Audio Research jargon) to AM radio. Absolutely not so with the CA906.

Out of the box the initial impression of the CA906 is a bit dark and buttoned down, but it has all the details and spatial information there is. Instruments in an orchestra are very well delineated and every tiny bit of nuance is passed with no exaggeration, squeaking, thinning, or coloring. These days when I audition any piece of gear I run through one or 2 of my favorite "reference CD tracks" and quickly jump to passages where the not-so-competent gear breaks down in various ways like compressed dynamics, muffled, hard piano notes, violin image unstable, thinning of certain violin notes, overly sibilant sounds, small background noises audible through ultra high resolution systems missing with the equipment in question. The Canary 906 passes each of these listening tests with ease, with everything, I really mean EVERYTHING better than my modded CA801SE.

I will need to return the CA906 soon and I sure hope I can get a chance to pit it head to head against my friend's MFA Lumi." (5/08)

Personal Note- The helpful reader has promised to send further details of his upcoming experiments and comparisons.

Canary 906 Preamp

This is the follow-up letter from the same **reader** who had a letter about Canary preamplifiers posted in **May 2008**. There is some minor editing and my **bold**:

"The story continues with the CA906. It continues to shine in my system which consists of a **Sonic Frontiers** transport and **Processor 3**, an **Altavista NP220** premium gold power amp (sometimes I still use my **VAC Phi 70/70**, but recently I am more inclined to favor the NP220s more "honest" sound) and **Avalon Eidolon** speakers.

Strings are the area which the CA906 shines the most. With material like **Gil Shaham** playing **Glazunov** and **Seiji Ozawa/Boston Symphony/Joseph Silverstein Vivaldi: Four Seasons**, the CA906 made my system sing like never before. This preamp has a wicked way of presenting the crescendo of violins with unbelievable realism. It conveys the right texture of the strings regardless of pitch or loudness. Another area where it shines is jazz saxophone. A lot of preamps tend to make saxophones growl. A well-known challenging track is **All Blues** in the **Reference recordings HDCD sampler**. The CA906 not only was able to handle the passage when played loud, but the texture of the instrument is there and never sounds stressed.

Another thing worth mentioning is the over-engineered volume control. You need to dial it up/down 5 clicks to change the volume equivalent to 1 notch in a conventional volume control. This really helps me dial in the optimal listening volume for every track.

Too bad I did not get a chance to put the CA906 head to head against my favorite preamp, a **MFA Lumi**, which was rebuilt and modified under the guidance of **Scott Frankland** himself. I had the Lumi in my system a few weeks before I had a chance to evaluate the CA906. As far as I remember the Lumi was more "dramatic" and has more "bloom" where instruments "float" out from the speakers. The CA906 was a bit more laid back. If memory serves me correctly, the CA906, while a bit darker, preserves even more microdynamics and presents a quieter background than the Lumi. Other than that the sonic signatures are very very close.

The CA906 did get a chance to up against the Lumi for one evening. The setup also has a Sonic Frontiers Processor 3, but has a biamped setup with the preamp driving a pair of **Tube Research Monoblocks** and a pair of **Rowland 1s**. The speakers were **Avalon Ascent IIs**. The Lumi was the resident preamp of the setup, and the whole system sounded beautiful given the constraints of the bass extension and the top end of the Ascents.

We were a bit disappointed when we plugged in the CA906. First we had to deal with a hum problem where despite selectively floating each piece of gear with cheater plugs the hum never really went away 100%. But the biggest letdown was that while the CA906 did not sound anywhere close to the Lumi, and did not sound anything like it did in my setup. In that system the CA906 sounded more like my **CA801SE** before I did the mods. The size of Midori's violin shrank regardless of volume level, and things began to sound marginally thin and stressed. We believe that it might have something to do with the Lumi's capability to swing huge voltage into the additional load due to bi-amping. The CA906 is

probably designed for driving 1 set of power amps only (preferably the **Canary 300B** amps perhaps?).

In my setup the CA906, was definitely better than any preamp I have owned." (6/08)

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