Subject: comparing amplifiers
Posted by Manualblock on Sat, 04 Dec 2004 16:00:15 GMT
View Forum Message <> Reply to Message

I have 2c's to offer here. I spent about 4 hrs. about three weeks ago listening and studying the Decware 84c with the top of the line upgrades on a pair of Dec speakers. They are Single Drivers and sound pretty good. I also own a Foreplay with all upgrades and a Seduction with all upgrades.I did a write up on the Stoetkit recently and am currently using the Tubes 4hifi el-84 rebiuld of the Dyna ST 35. Why do I say all this?Well; thinking hard on this I have come to some conclusions.The original SEX kit was a great thing; there were no inexpensive SE amps anywhere to be had so it was a great way to get involved. And it sounded pretty good.Now there are inumerable kits available for under 600$. Most of the people on this forumm have heard them, Bottlehead/Consonance/TBHF/ Dec.. on and on. It's fun to build them and play with parts and join the forumms. But what I am begginning to notice is a certain solid state sameness to the sound of all of them. I cannot say if that is a deliberate design descision or not but it is there and it is noticeable. Now there isd a new game in town; the chip amps. They sound different but in many ways just as good as the cheapo amp kits.I now have the T-amp/Brian GT's GC and listen to them daily. This may spell the death of cheap tube amps. Not good tubes just inexpensive ones: which brings me to my point; any one of the amps mentioned sound good with reasonably efficient speakers. There is one thing though; none of them sound great.Aye' there's the rub; after playing with these units for a couple of years; a good, rebuilt to specs Eico, still trounces any of them. There is a component of very good reproduction that is definately missing. How to define it; well like the bluesman said I know it when I hear it. I would love to say the cheap amps do the thing, I can't and I know in the end it is going to cost me money. But the real sound is out there and probably is a tube driven circuit with a big fat triode and hugely expensive transformers.The good thing is you can get 85% of the way there for a few hundred bucks. But my new opinion is buy the GC kits for 70$ and spend the rest on your front end. The chip amps sound great with efficient speakers and you can slap them together in a day. I can hear the banshee screaming in the distance for those cheap tubes now. And you are free from the tyranny of tube sellers and thier predatory pricing schemes.

Subject: Re: comparing amplifiers
Posted by Wayne Parham on Sat, 04 Dec 2004 21:29:16 GMT
View Forum Message <> Reply to Message

Hi John,You won't hear "banshee screaming" from me; I agree with you. I think the good news is that if the kit makers are making them sound right, they all will sound pretty much the same. There will be subtle differences, because amps like that are pretty sensitive. They have high output impedance and no mechanisms for distortion cancellation. But all-in-all, if they're pretty good they'll have similar tonal characteristics.Stuff that sounds different in stark contrast are those amps that have 10dB rolled off high end, stuff like that. I really wince when I hear equipment that's way off, no point in having it in my opinion.I see the tube amps as a form of art. They're not just engineering, they're also art. In fact, maybe more so.I think I've been as intrigued by the aesthetics and novelty as I have the sound. So that's a part of the deal to me. When I see a tube

amp that sounds good but looks like a science project, and another that also sounds good but looks like art, I'll take the attractive one every time. Sure, form follows function but that's not to say that form has to be ugly for function to be good.Wayne

---

Subject: Re:Building kits is like cooking from a recipe
Posted by BillEpstein on Sun, 05 Dec 2004 09:44:09 GMT
View Forum Message <> Reply to Message

Measure carefully and perhaps your hypothesis is correct. As Wayne suggests tonal neurality is, or at least should be, a design goal. But there are so many changes that can be made to influence the "flavor": chokes, capacitors, additional filtering, volume controls, tube-rolling that the end product can be very different sounding than the original design.

Subject: Re: comparing amplifiers
Posted by Manualblock on Sun, 05 Dec 2004 16:45:42 GMT
View Forum Message <> Reply to Message

Wayne and Bill; Amps and pre-amps are funny in that they are portable and easy to build so therefor everyone tries out many different amps and everyone has an opinion. Lugging big speakers around ain't happening and CD's are still mostly buy and play items. Vinyll is tricky to set-up so not portable and too many variables too get right. That leaves the amps. Trying different caps and resistors and wire and chokes make a noticeable difference in sound. Is it better? Usually just different;.."Flavors".I don't know about you guys but I am only trying for the best sound I can get for the money I have. Playing with amps and pre-amps is fun but in the final analysis the best bang for the dollar comes from room treatment in my humble opinion. Then your front end. Then the speakers. Listening to the super Decware set-up made me realise that the infatuation with low cost alternative amplifiers is a dead end. It seems they can only go so far towards good sound, when I and others take a pair of Eiclones and they sound better than a fully tricked out Dec, I have to question where and how to proceed.Now these chip amps come out and they sound damned good; almost as good and in some ways better than a pair of Bottlehead Paramours that run 600$ I now have to question the wisdom of spending on the amps when that extra 500$ could buy me a Audio Technika ML 150 cartridge that makes a huge difference in the ultimate musicality of the whole system. And still have 250$ left over.Thats just me theorizing; the Banshee reference I used stems from the old Irish myth that says anytime the screams of the Banshee are heard in the village someone will die within a fortnight. The death knell for cheap tube amps in the form of a chip.

Subject: Re: comparing amplifiers

Posted by colinhester on Sun, 05 Dec 2004 18:15:56 GMT
View Forum Message <> Reply to Message

STOP IT!!! You're killing me with all this talk of t-amps sounding as good or better than tube amps. Do you realize how much money I've spent in the search of AUDIO NIRVANA, only to tell me I've been looking for the wrong plateau. Off with your head Seriously though, you really have me curious about the future of tubes vs. solid state. Why do I listen to tubes? Is it out of nostalga? Is there a mysterious, yet unmeasurable psycho-accoustic force that draws me in? Time to go meditate over a hot pot of solder and look for answers in the swirls of the toxic eutectic.....Colin

Subject: Re: comparing amplifiers
Posted by Wayne Parham on Sun, 05 Dec 2004 18:30:39 GMT
View Forum Message <> Reply to Message

Banshee screams in the background You know, I remember hearing that story about the banshee on an Art Bell radio show or something.

Subject: Re: comparing amplifiers
Posted by Manualblock on Sun, 05 Dec 2004 21:32:34 GMT
View Forum Message <> Reply to Message

My Father-in-Law was a NYC cop, and he tended bar part time at The Blarney Stone. He was Grand Master of the Hibernians at the lodge. His people came from County Cork not far from Tralee in the South of Ireland. He liked to take a drink now and then and The man could tell a story. It began when you met him and it did not end until he passed away. No one can tell a story like the Irish. He had all those old world superstitions; they told him about the Banshee when he was but a chiuld.

Subject: Re: comparing amplifiers
Posted by Manualblock on Sun, 05 Dec 2004 23:18:16 GMT
View Forum Message <> Reply to Message

No No, my friend; Tubes are still king make no mistake. Unfortunately the Transformers and circuits are unforgiving and require those really high voltages and lots of metal to get the response down low and up high. And we know what that means, lots of money. If you think this is expensive, take up golf; or boating. How does the saying go; if you have to ask the price, then you

can't afford it.

Subject: Re: comparing amplifiers
Posted by Wayne Parham on Mon, 06 Dec 2004 03:16:05 GMT
View Forum Message <> Reply to Message

Hey, I just learned some trivial trivia on the History Channel. Did you know that the original name for the Pontiac Firebird was the "Banshee?" John DeLorean had designed a two-seater and GM axed it, forcing him to make a four-seater to compete with the Mustang. It was to use the same chassis as the Camero but DeLorean pushed for use of a larger 400 CID engine. Along the line, the "Banshee" name was also dropped and "Firebird" was chosen instead. Pretty cool little factoid, huh?

Subject: Re: comparing amplifiers
Posted by Manualblock on Mon, 06 Dec 2004 12:39:32 GMT
View Forum Message <> Reply to Message

Nice. We all gota get lives!

Subject: Carver's Pro Tripath Amp
Posted by colinhester on Mon, 06 Dec 2004 17:01:14 GMT
View Forum Message <> Reply to Message

Looks like there's some serious interest from the "big boys."
http://www.proaudioreview.com/par/july03/carver_zr1600.shtml

Subject: Re: Carver's Pro Tripath Amp
Posted by Manualblock on Mon, 06 Dec 2004 18:54:46 GMT
View Forum Message <> Reply to Message

How do you justify 1100$ for a 30$ amp chip? Thats one expensive box.

Subject: Re: Carver's Pro Tripath Amp
Posted by colinhester on Mon, 06 Dec 2004 20:06:04 GMT
View Forum Message <> Reply to Message

Yes, it is a little expensive for a $30 chip. However, what would a 300wpc tube amp cost?!?!?!?Colin

Subject: Re: comparing amplifiers
Posted by Wayne Parham on Mon, 06 Dec 2004 20:08:11 GMT
View Forum Message <> Reply to Message

Subject: Re: Carver's Pro Tripath Amp
Posted by Manualblock on Tue, 07 Dec 2004 11:53:15 GMT
View Forum Message <> Reply to Message

Point taken. In AudioeXpress this month, Norman Thagard has parralled 8 Citation 11 tube amps for 480 watts out. What a sight, the whole set-up weighs over 500 lbs.

Subject: Re: Carver's Pro Tripath Amp
Posted by colinhester on Tue, 07 Dec 2004 14:28:03 GMT
View Forum Message <> Reply to Message

I've always enjoyed Dr. Thagard's articles. His amps are always so over the top. My aX has not shown up yet. This article along with the Tand Bang project should make for some good reading. Do you ever look at Tech Talk at Parts Express' site? Those boys are all over TB projects.....Colin

Subject: Re: Carver's Pro Tripath Amp
Posted by Manualblock on Tue, 07 Dec 2004 22:23:47 GMT
View Forum Message <> Reply to Message

No I will have to check them out. In the article they do some radical stuff such as using a heating iron to dimple the cone. Thagard is something else ain't he? I hold him up to my son as an inspiration.

Subject: Some reasons why SETs sound different
Posted by akhilesh on Wed, 08 Dec 2004 19:52:53 GMT
View Forum Message <> Reply to Message

HI John & everyone else,Good post! Here are my 2 cents:An amplifier should sound different if it offers:a) a non flat frequency curveb) appreciable distortion (over 5% to be audible with music)c) High output impedance, in other words, low damping factor. Most solid state amps today, even the el-cheapo ones, are pretty much dead flat freq curves, non audible distortion (below 1% usually) and have very low output impedances, along with very high input impedances. Tube amps: ahhh...they are all different. For example, I did a review of the Stoetkit Jr with the Zen se84c, and the zen se84c seemed a lot clearer, probably becuase it emphasized the midrange more (in other words, not a flat freq curve). Usually, SETs have higher (much higher) distortion than even push pull tube amps, and as they clip this sound can be liekd by some people (esp. guitar players!). Finally, having a low damping factor can artificially increase the bass in single driver speakers, esp. with heavier cones. That is why these speakers sound better with SETs than SS amps. Which offers greater "fidelity"? I think SS amps for sure. Which is more fun to play with, as long as you don;t care about fidelity, but just want to have fun and listen to music? Tube amps, esp. SETs! My 2 cents.FYI, I own 3 SETs: one zen se84c, one asusa (el 84 with 12ax7 drivers) and one classic SET 45 tubed (the one I listen to most, and the one that probably measures the worst!)I also have a solid state Yamaha amp I just bought from the late 1970's: sounds great but no character: kinda like buying a HOnda versus an old MG roadster, if you know what I mean! -akhilesh

---

Subject: Re: Some reasons why SETs sound different
Posted by Manualblock on Thu, 09 Dec 2004 00:38:08 GMT
View Forum Message <> Reply to Message

Hey AK where ya been? The 45 is the Korneff right?

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Thu, 09 Dec 2004 03:02:44 GMT
View Forum Message <> Reply to Message

HI John,Just hanging. The 45 is not a korneff but a custom job i bought off the internet. Nice ly

done. -akhilesh

Subject: An alternate take
Posted by DRCope on Thu, 09 Dec 2004 15:13:31 GMT
View Forum Message <> Reply to Message

First, only one of the amps described above is an SET. The T is for triode.Single ended triode amps have higher THD because they don't resort to negative feedback as a band-aid to fix the inherent nonlinearity of pentodes and transistors. Their distortion is almost entirely low (2nd, 4th) even order distortion, which is much less disturbing to the enjoyment of music than far smaller quantities of higher, (3,5,7 etc) odd order harmonics, which transistor amps produce in more than sufficient quantity to toss the musical baby out with the bath water. Feedback, especially global feedback, obscures and destroys fine detail and thoroughly screws up timing.As to clipping, transistor amps clip like a ton of bricks - one step over the line, and it's like a waiter dropping a tray stacked high with glassware. Tube amps, and in my experience, SET's in particular, clip much more gently, so an occasional overdoing the volume isn't ghastly. On the other hand, if you're using the right kind of speakers, you won't be clipping the amp in the first place. Kept in the linear part of their response, distortion is extremely low, and fidelity to the musical signal extremely high. That's why you hear/read so often that the most important thing is to get the first watt right. Having a lousy first watt, but hundreds more to back it up is not nearly as satisfying as having a handful of watts, but all of them musically communicative.As you noted about the Yamaha amp, the best solid state amps do little to offend, but they render the music uninteresting and blah. It's not the amp that has no personality; its personality has stripped the composer and the performers of theirs!Why do you suppose that every year at CES I find a short tour of the rooms exhibiting solid state gear exhausting, while I linger in (most) of the rooms utilizing tube gear - SET's in particular? It's all of the above combined.I know this will draw a response of "sure ya like it - ya sells it!", but the fact, as several of you know, is: I got into this nutty business because of what the gear I sell did for my listening enjoyment BEFORE I sold it. I'd be making far more money, but having a lot less fun if I'd stuck to MOR gear and a corporate job.

Subject: Re: An alternate take
Posted by Manualblock on Thu, 09 Dec 2004 17:52:35 GMT
View Forum Message <> Reply to Message

Say DR you ought to point some of the naysayers to the article in the previous issue of AudioeXpress where Jean Hiraga and others explain the reasons they believe Amps that generate higher order distortion artifacts sound bad. A violin exhibits many harmonics of the fundamental tone yet sounds pretty good.I have read studies showing that all amps clip. So to me that just strengthens your argument. What gets me is why others can't seem to hear or admitt they hear this irritating solid state problem. I don't sell anything but I do love music. Why in Gods name would we not want to pay 300$ for an amp instead of 3000$? It just assumes all tube guys are

fools.

Subject: Re: An alternate take
Posted by akhilesh on Thu, 09 Dec 2004 20:06:22 GMT
View Forum Message <> Reply to Message

HI DR,YOu are right. THe other two (the zen and the ASUSA) use pentodes wired in single-ended triode mode. I am not sure if the extremely low levels of distortion in ss amps are at all audible. I think some scientific studies have shown about 0.5% THD is audible for pure sine waves, much higher for music. So, if an amp is producing THD of 0.2%, it's components (whether odd or even order) may not matter. I think SETs produce more involving sound becuase of the 3 reasons I mentioned in my post above. In a sense, they offer equalization that is preferred by many of us. As a fond SET owner & listener, I am obviously on your & John's side. I just don'think that SETs actually provide better fidelity, in fact I think they provide appreciably worse fidelity...they just SOUND better, in other words they manipulate the signal so it sounds good. For example, audible second order distortion actually makes a signal SOUND "fatter" or weightier....which I persoanlly like....makes the illusion more real! But if the goal is fidelity, then I at least have to go with solid state. IF the goal is enjoyment, then it doesn;t really matter. AS i said, i usually lsiten to my SET 45, which probably measures god awful, but who cares?-akhilesh

---

Subject: Re: An alternate take
Posted by DRCope on Thu, 09 Dec 2004 20:21:14 GMT
View Forum Message <> Reply to Message

As far as I'm concerned, it's ALL about musical enjoyment. What the heck else is an audio system good for? You can't eat it, drive it or make love to it. (AFAIK. Please don't correct me if I'm wrong about any of those!)I've yet to hear a solid state amp whose reproduction bears even a passing resemblence to any instrument or any voice, but quite a few SETs that do. So the question is: Fidelity to what?Good SET amps do not sound fat. I've heard quite a few that do, but remember, I said *good*. Not only good design, but equally important, good quality key parts, particularly iron and power supplies, but also caps, resistors and wire. The ones I listen to regularly sound extremely detailed and precise, without losing the organic sense the sand amps never have.But, chac un a son gout, which, of course, is French for "to each his own goo."

Subject: Re: Some reasons why SETs sound different
Posted by thetubeguy1954 on Thu, 09 Dec 2004 21:14:04 GMT
View Forum Message <> Reply to Message

Hello everyone. I'm a new member who migrated over from Audio Asylum. I couldn't remain where a subject cannot be debated and discussed, but rather turns into name calling as self-proclaimed audio gurus attack all who disagree with their audio beliefs. While musical monks constantly chant STEREOPHILE DOES NO WRONG, STEREOPHILE DOES NO WRONG, over & over again... Well in any event I read this thread with great interest. I own a Mastersound Reference 845 integrated SET. It's very big (15" L x 22" D x 10" H) heavy (150LBS) and expensive. I believe that manualblock had it correct when he said; "Why in Gods name would we not want to pay $300 for an amp instead of $3000? It just assumes all tube guys are fools." I agree with that statement 100%!!!! I didn't buy the Mastersound because it cost a lot of money. Fact is, I'm disabled and need to save long and hard to buy my audio components. I didn't buy it because it's an SET, either. I bought the Mastersound because it came closer than anything else I'd ever heard to making music sound like music. This amp stopped me from criticing my CD and lulls me into listening to my CD's. It makes one song turn into a CD. Then it makes a CD turn into CD's. Next thing I know it's 3 AM in the morning and I still want to listen to music. That's the main reason anyone who buys any piece of audio gear should buy it! BECAUSE IT MAKES MUSIC. Find me another amplifier that; A) SOUNDS as much like real music as the Mastersound does and B) LOOKS, yes looks plays a part in my choice, as good as the Mastersound does for under $3000 and I'll buy it and sell the Mastersound TODAY! I have no vested interest in spending a lot of money or buying an SET. It's just that, unfortunate as it may be, SET's come closest to making music sound like music. Even more unfortunately, the more they cost, the more realistic they become. I've owned solid state and it can be good, but it's never GREAT. I swore I'd never own tube equipment, afterall from the moment you turn them on your tubes (like us) are just that much closer to death. But when I heard a good tube system, I knew it was superior to solid state. Just like when I heard an SET I knew it was superior to all other tube topologies (maybe OTL is an exception ~ I'm still undecided) SET is like SEX, once you've had it, you cannot imagine life without it. I believe this to be the truth with all my heart and soul. I just wished someone could make a $500 solid state amp sound like a $5000 or $10,000 SET does. Then I could afford to bi-amp or tri-amp. But until that day arrives, I'll live with my 40W ch of SET bliss. I'd like to also address something akhilesh said. After akhilesh proposed the question: "Which offers greater "fidelity"? he proclaimed "I think SS amps for sure" I must state that I disagree with this statement 100% I firmly believe that SET's offer the greatest fidelity! According to the Merriam-Webster Collage dictionary Fidelity means:1 a : the quality or state of being faithful b : accuracy in details : EXACTNESS2 : the degree to which an electronic device (as a record player, radio, or television) accurately reproduces its effect (as sound or picture)So if we use #1 as the main meaning, then for true musical fidelity we need to have accuracy in details or "exactness". This is exactly what an SET offers, Musical accuracy. Think about it. Isn't that what everyone who owns an SET says? Just how much it sounds like real music! How can it sound closer to real music and be less accuarte? It CANNOT! Unfortunately, many people look at what the microphone produces. They then compare that signal to another electrical signal and claim how accurately one electronic signal is to the other electronic signal. But our ears are not microphones, they hear completely differently. If you don't believe that statement to be true, please explain why, in any setting, where the music and singers are NOT amplified electrically you'll never hear simbilance (that exaggerated sssss sound at the end of words) yet take that same performance, record it and listen to what the microphone heard and BAM simbilance is now introduced and heard. So either a) It wasn't there in the performance and was later introduced by the mic or b) our ears don't hear like mics do. Either way you look at it, I don't want it added to the music. This is a tough subject and could go on and on. However IMHO, SET's are more accurate than solid state in that they sound more like real music. Solid state is more accurate than an SET when you are comparing

one electronic signal to another electronic signal. Just like the second meaning in the dictionary...Tom Scata (thetubeguy1954)That's my 2 cents worth.

Subject: Re: Carver's Pro Tripath Amp
Posted by thetubeguy1954 on Thu, 09 Dec 2004 21:33:39 GMT
View Forum Message <> Reply to Message

Yeah but with 500LBS of Trannies and tubes, you have something to show for your hard earned cash. I guess these guys say "It sound like a $3000 SET so it needs to cost what a $3000 SET costs! That's why there will NEVER be a GREAT $500 solid state amp that sounds like a GREAT, Heavy, expensive SET does. They'll build their amp with $100 worth of parts and rather then charge $500 or $1000 they keep comparing it to more and more expensive amps until they say "opps not quite as good as the $2000 SET. Let's charge $1800"Tom Scata (thetubeguy1954)

Subject: Re: An alternate take
Posted by Wayne Parham on Thu, 09 Dec 2004 22:11:36 GMT
View Forum Message <> Reply to Message

Maybe SET could be Single Ended Tube? I think most consider it to mean single-ended triode but maybe it could be used in a broader sense, just being a Class-A tube amp configuration.

Subject: Re: An alternate take
Posted by Wayne Parham on Thu, 09 Dec 2004 22:14:06 GMT
View Forum Message <> Reply to Message

"As far as I'm concerned, it's ALL about musical enjoyment. What the heck else is an audio system good for? You can't eat it, drive it or make love to it. (AFAIK. Please don't correct me if I'm wrong about any of those!)"

Subject: Re: An alternate take
Posted by akhilesh on Fri, 10 Dec 2004 01:56:26 GMT
View Forum Message <> Reply to Message

Nice thought, Wayne! Actually, i think it IS triode. The pentodes can be wired in triode mode if two

of the 5 elements are not considered. That's how the zen & asusa amps use pentode tubes, wired in TRIODE mode -akhilesh

---

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Fri, 10 Dec 2004 02:09:49 GMT
View Forum Message <> Reply to Message

HI Tom,Welcome from the asylum. Many of us here share your thoughts about that place! I agree with you that SETs sound great. In fact i just listened to my quasi single driver home brewed setup with my set 45 amp today and really liked it. I still think that SETs sound different from other amps becuase of the 3 reasons in my post above. In fact I know this to be true... i don't just need to take it on faith. However, this does not mean that's bad: otherwise i would not own SETs! I LIKE how they alter the signal. But that they alter the signal can be easily proved. In terms of what is fidelity: that is a matter of semantics,right? If you define it as something one BELIEVES is accurate, then that is one thng...if it is defined as something measured as accurate, then that is another thing. I think most people would define it as the measurable faitlhful reporoduction of an input signal at hte output...but hey....who cares? It's all semantics. Also, many of us may be interested to know that anything a SET amp can do CAN be duplicated in an SS amp, in fact Bob Carver did produce his amps in the mid 1990's with 2 outputs: one with low impedance and one with significant impedance (to reduce the damping factor). Tailoring a frequncy curve is not a big deal either. Neither is introducing audible even order distortion. All of these can be introduced in an SS amp. Anything a tube amp can do in terms of amplifying a signal, an SS amp can do. The good thing with an SS amp, if someone like Bob Carver were to do this again, would be to offer us CHOICES: like, a set of settings for a 300B type effect, another for a 45 type effect, and so on. That would be really cool! I await such an amp. Maybe some DIY type here can figure out the circuit for us! The reason why such a thng is not done, in my opinion, is becuase most amps today are based on commercial chips, and no chip designer will design an amplifier that would conform to the specs of a tube...they'd be laughed out of the business. What we need is a dedicated discrete digital amplifier! But if we have to use those, may as well use tubes. Hence the current state.PLease do not take this as a criticism of SETs: I LOVE them. 3 out of my 4 amps are SETs. But that they do the three things in my earlier post can be easily ascertained by talking to electrical engineers who are old enoughto have had tube training!-akhilesh

---

Subject: Re: Some reasons why SETs sound different
Posted by thetubeguy1954 on Fri, 10 Dec 2004 14:22:58 GMT
View Forum Message <> Reply to Message

akhilesh, thanks for welcoming me to the "table". I knew from your post that you both owned and enjoyed the sound of SET amps. As I said this is a tough topic to discuss, for a myriad of reasons. We do need to establish one thing however or else this discussion will have too many variables. What is going to be our definition of accuracy for this discussion? My definition of accuracy is; An

accurate replication of music is the one that SOUNDS the closest to the original acoustic event as interpreted by the human ear. I do not believe we can define accuracy as the one that MEASURES closer to a microphones interpretation of the original event. I noticed you completely ignored this area of my post. If a microphone hears or interpets a musical signal differently than the human ear does, and I believe that is the case for reasons stated in my previous post. How or why would we use the microphones interpretation as the standard of accuarcy? For example: Humans hear differently than dogs. Granted in this case it's in areas of frequencey and sensitivity, but ihey hear differently. Could we then use a humans hearing to accurately determine what a dog hears? No, we cannot! Neither do I believe can we use a microphone to accurately determine what a human hears, for the exact same reasons. The "hear" differently. If we are to continue this discussion you'll need to address this issue. But I will not continue this discussion after this if you do not address the issue or whether or not; a) Humans & Mics hear differently and b) Why you choose a Mics interpretation over a humans as your basis for defining accurate.Now to address some of your points. A)You stated "I LIKE how they (SET's) alter the signal. But that they alter the signal can be easily proved. The question my friend is not whether an SET alters a signal or not. I will readly admit that an SET will alter the electronic signal it receives. But, what we really need to know is how close does the signal fed to an SET accurately represent what a human hears? It's my belief that in altering the signal, the SET's output is actually closer to what a human hears. Hence, the output sounds more realistic because it's a more accurate replication of what we hear at an unamplifed acoustic event.B)I think most people would define it as the measurable faithful reporoduction of an input signal at hte output...but hey....who cares? It's all semantics. I think ENGINEERS would define accurate as the measurable faithful reproduction of an input signal at the output. Music lovers "should" define accurate as an output that replicates the original acoustic event as faithfully as possible to the human ear.C)Anything a tube amp can do in terms of amplifying a signal, an SS amp can do. I don't doubt this at all. I remember when Bob Carver did that famous experiment. If I remember correctly he fed the output of his amp and the amp he wanted his amp to sound like, to a common location. He then kept making adjustments to his amp until he got a "null" as the reading at this common location (or something like this) and when he got a null reading the amps sounded the same! However, I do believe that Solid State designers won't make their amps sound like a SET's Why? Because they are glued to specifications as their guide instead of their ears. Why else doesn't Bob buy a $5K or $10K SET and make a $1000 solid state amp that sounds like it? Trust me I'd buy it in a New York minute! I'd save 1000's of dollars, not have to deal with the heat of 845 in Class A, not have to pay BIG BUX for good NOS tubes, the amp wouldn't weigh a ton, I could afford to Tri-amp etc. But if it should happen that someone out there does make a solid state amp sound like a good SET, he'll just charge you $5000 for a $500 amp because it sounds like an SET. So I don't have much faith in that group of engineers. But you're correct they could do it "IF" they wanted too.D)The reason why such a thng is not done, in my opinion, is becuase most amps today are based on commercial chips, and no chip designer will design an amplifier that would conform to the specs of a tube...they'd be laughed out of the business.I disagree with this statement 100%. Bob did it with components back in what the 70's or 80's? It's not because of the commercial chips being used. Again I say it's because they are glued specifications as their guide to being accurate, when they should just use their ears.Again, this is a very tough discussion. Until we agree on how we define accurate we cannot agree on anything else in the discussion. It's catch 22 Thanks for your thought and input.Tom Scata (thetubeguy1954)

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Fri, 10 Dec 2004 15:18:19 GMT
View Forum Message <> Reply to Message

Hi Tom,Any measure of accuracy is fine by me. IF we choose it as what a human hears, then it becomes psychoacoustical, and will vary from person to person. Also keep in mind, the recording one is hearing has already been miked, and encoded. So, maybe you are saying that somehow a SET undoes the effects of the mike-encoded signal, and makes it sound live. I think it simply does the 3 things I mentioned in my earlier post, and makes the music sound better. For example, exaggerated midrange leads to greater presence, lower damping factor leads to more bass (though less controlled) and the distortion leads to a "richness" or fatness in sound. All of these can be interpreted by us as sounding better, and so, by your definition of fidelity a SET is indeed better. I think it's semantics: essentially we are agreeing: a SET will not output the (transformed) input signal as accurately as a SS amp, but it does sound better. BTW, Bob Carver's Sunfire amps actually did a pretty simple thing, his "Current" output speaker terminals simply had a 1 ohm resistor in series, to reduce damping factor. In his ads, he stated that the reduced damping factor accounted for 90% of the tube sound. I am not sure how he reached that conclusion...my own opinion is that increased distortion & frequency curve play a role as well. You are right, one can use standard chips to do many of the things a SET does....including I guess introduce even order distortion. Since I am not an electrical enginner, I will not speculate how one can do that.
-akhileshPS: try having a civil discussion liek this in the asylum....ha

Subject: Re: Some reasons why SETs sound different
Posted by thetubeguy1954 on Fri, 10 Dec 2004 17:22:15 GMT
View Forum Message <> Reply to Message

Hi Akhilesh, you're 100% correct it would be impossible to have this discussion in the Asylum, I tried and was insulted and ridiculed for my beliefs. I want you to know I have no experience with DIY or building amps. I cannot tell you why SET's do what they do. However, I've been a music lover/audiophile for 36 years now. Also I play some acoustic guitar, so I have a pretty good ear. When you said "So, maybe you (thetubeguy1954) are saying that somehow a SET undoes the effects of the mike-encoded signal, and makes it sound live." YES Akhilesh, I think that expresses exactly what I believe. Now I'll grant you that not every person hears exactly the same amount of information, do to a variety of factors. However how we hear is the same. We all know when a Sax is live as opposed to recorded. I believe that somehow Mic's and 99.9% of solid state equipment adds or removes something to the signal that alters the original acoustic event. Then on a psychoacoustical level, when it played back our brain tells us "This is NOT real, it's a recording." I believe 2 of the major factors that contribute to this are: Greatly reduced dynamics as opposed a live event and two different sets of reflections existing at the same time. For example: When we play back music on any system (even an SET based system) we hear reflections of sound waves as they reflect off the floor, ceiling, walls, etc of the room the music was recorded in. Now when we play that recording in our homes we add to those reflections the reflections that occur in our room as the sound reflects off the floor, ceiling, walls, etc of our room. Hence again on a psychoacoustical level our brains cry out, this is NOT real!Lastly when you

mention "Bob Carver's Sunfire amps actually did a pretty simple thing, his "Current" output speaker terminals simply had a 1 ohm resistor in series, to reduce damping factor. In his ads, he stated that the reduced damping factor accounted for 90% of the tube sound. I am not sure how he reached that conclusion." Akhilesh, to that I can only say that I know for a fact that his Sunfire amp doesn't sound like my SET does. I also know that it took him a hell of a lot more components and time then just adding a 1 ohm resistor in series to make his amp sound like the tube amps when he accepted the original challenge. I think it takes a lot to make a solid state amp sound like a $5K or $10K SET does, heck even $2K SET's don't sound like the $5K and more expensive SET's do, do they?Please talking with you.Tom Scata (thetubeguy1954)
http://groups.yahoo.com/group/singleendedtriodes/

Subject: Re: Carver's Pro Tripath Amp
Posted by thetubeguy1954 on Fri, 10 Dec 2004 17:51:58 GMT
View Forum Message <> Reply to Message

Colin, no I haven't read any of his articles. What's the Tand Bang project? Is that the speaker called "NEEDLES"? That speaker looks interesting. They use 16 three inch Tang Bang drivers and 1 ARg3 ribbon tweeter per side. Here's a link to it...http://www.creativesound.ca/details.php?model=NEEDLESStill like I said in an earlier post. "IF" I spend $3000 I want to get $3000 worth of equipment. I just cannot sanction the belief that because an amp sounds like a $3000 amp means it should cost $3000. If the amp only has a the same amount and quality of components as another company's $800 amp does, it should cost $800. I get sick when I see a good product come along, solid state or tubed, get a great review and then BAM!!!! it goes up in cost by 33% to 50%. The engineers that make solid state amps could go out buy a $10K SET amp and taylor their solid state amp to sound just like it. Bob Carver did that exact thing years ago. The fact that they don't proves either they truly believe their solid state gear sounds better. To which I say "Clean out your ears!" or they just don't care. I long for the day that I can get $10K SET tube amps sound in a $2000 solid state amp. I'll save on the intial expense of purchasing the amp, I'll save on energy bills as opposed to running paralleled 845 tubes in Class A, I'll save on the expense of NOS tubes, etc. So why don't they do it? Huh? OK guys speak up, because I really want to know the answer to that question.Tom Scata (thetubeguy1954)==========Music never makes you sick, but noise always annoys.
http://groups.yahoo.com/group/singleendedtriodes/

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Fri, 10 Dec 2004 20:40:18 GMT
View Forum Message <> Reply to Message

There you go, bud. Agree with you. In fact, one approach is: what does it matter what a signal measures, as long as we like it. THat's the attitude of most SET owners, like you & me, and

frankly, to me that makes sense as a music listener, though maybe not if i were an acoustical engineer, or trying to get the best measured performance. If Bob Carver reads this, maybe he can tell us what he did... he knows a helluva lot more about amp design & acoustics than almost all of us, including almost all folk in the business. BTW, the SETs i own cost me a LOT less than what you are saying. THe zen amp is hand made for you by Steve deckert at $499 (it comes with a 30 day back guarantee: you MUST try it & steve offers GREAT customer service), the Asusa amp i got online for far less than that, and the 45 set (which has pretty high end parts: blackgate caps, good resistors, stancor power tranny, james output trannies, jupiter coupling caps) also cost me under $1500.I like them all. They are cheap & LOADS of fun. What kind of system do you have, Tom?-akhilesh

---

Subject: Re: Some reasons why SETs sound different
Posted by thetubeguy1954 on Fri, 10 Dec 2004 21:16:57 GMT
View Forum Message <> Reply to Message

Akhilesh, ok since you asked. My amplifier is a 150LB, Italian designed, Mastersound Reference 845, inetgrated SET amp.
http://www.acousticdreams.net/mastersound845referenceampmainpage.htm It uses (per channel) a Mazda "chrome-plate" 12AU7 for preamp, then a Bendix 6900 as a driver, followed by paralleled 845's running in Class A for 40W channel of the sweetest SET music I've ever heard. My source is also Italian designed. The Blue Note Stibbert CD Player 24/96
http://www.bluenote.it/bluenote_product.asp?cat=tabCdplayers My speakers are again Italian designed. The Aliante Pinafarina Ones http://www.aliante.com/pf/onepinin.htm For interconnects I use American Z-Squared Au/Au's. http://www.z2audio.com/auaualloy.html These are an incredible find. They are a gold/silver/copper alloy that's 24K gold plated. They list for $1799. However they can often be bought on Audiogon for $250. "IF" you don't think that's too much for an interconnect I say JUMP ON THEM! You'll never look back and probably never upgrade cables again. For speakerwire I use American Nordost Blue Heavens.
http://www.nordost.com/Cables/speaker-flatline-blue-heaven.htm These are also an incredible buy for the money. I've seen them smoke cables that cost many times more. Their only problem is they can be a little splashy at times. I didn't hear that until I got the Mastersound/Blue Note combo working together. I'd wager that in about 90% of the systems out there you wouldn't hear what I describe as splashy. Also they give a real taste of the Valhalla's at a fraction of the $$$$ Finally my powercords which are also American are Stealth Audio M21 Super's
http://www.stealthaudiocables.com/products/m21power.htm I provided links so you can see these components for yourself. My listening preferences are, in order of preference; 1)Smooth Jazz (Fourplay, Skywalk, Spyro Gyra, Khani Cole) 2)Jazzy New Age (Max Laser, Peter Kater, William Belote, Val Gardenia) and finally 3) Progressive Rock (Marillion, Genesis, YES, Starcastle) Tom Scata
(thetubeguy1954)==========If natuer abhors a vacuum, why does vacuum tube equipment sound so damn good?

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Sat, 11 Dec 2004 13:54:06 GMT
View Forum Message <> Reply to Message

Sounds like a great system....pretty high dollar too. My systems tend to be el cheapo with multiple components. Here is a fun idea for you to thnk about: Get the 2 watt zen amp for $499 with a 30 day money back warranty, and also get steve deckert's high eff. speakers (single driver doped fostex) with eff of around 96 db i think. These go for around $1700. try the combo, and see if you liek it. I am not sure if he gives money back on the speakers, but the amp for sure. You'll need high eff speakers for a low pwer amp. try this combo if you ever get a chance. I thihnk you'll like it. I know John (manual block) has heard it. Maybe he can tell us what he feels. Alternately, you can also try other high eff speakers: high eff speakers & low powered SETs are a good match. My speakers are a pair of 104 db klipschorns (1978), and a pair of homemade speakers (vintage trusonic drivers & a tweeter) around 95 db. SOmetimes I run them in parallel, esp if I am listening to a symphony. Pretty dynamic! My source is by museatex: transport, with a bidat dac (fully modded by john wright) and/or an unmodded bitstream dac (yes I use 2 dacs running out of 1 transport to my 2 sets of speakers). This rig has certainly kept me happy, until i build my NEXT dream speaker project (this time using modern drivers) that is.-akhilesh

Subject: Re: Some reasons why SETs sound different
Posted by thetubeguy1954 on Sat, 11 Dec 2004 20:36:44 GMT
View Forum Message <> Reply to Message

Yes Akhilesh, it does sound great. I was very lucky on every purchase I made. I seem to have this knack for finding dealers who want to dump demo units. For example: I bought the Mastersound amp as a dealer demo with warranty @ 60% of list. The Blue Note CD player was also a dealer demo with warranty that I got @ 50% of list. Being disabled makes buying anything a long slow process of saving. Thank goodness I also had a few goodies in the closet after, 36 years of being an audiophile. So I can use these either sell or make trades at times. However the closet is now down to a pair of virtually NOS Stromberg-Carlson Slimline 15" Coaxes, that smoke the Altecs & JBL's. And IMHO are of equal footing with Tannoy RED's. I've thought about putting them in a 60 inch high rear loaded folded horn based on 1956 Jensen~Imperial Folded Horn. The plans are available on Decware's site: http://www.decware.com/newsite/mainmenu.htm I'm a member of the Central Florida Audio Society, so I've heard my share of Lowthers, Fostex, Voight Pipes along with 2A3, 45 and other low watt SET's. They're nice but not a road I plan on travelling. I'd be willing to put the 1st watt of the Mastersound with any 2A4, 45 or 300B i've heard to date. So don't need or want a low power SET, but Im considering a Hi-Efficincy speaker design as I mentioned above. I'm also thinking about a completely unique design that uses 4 of the higher quality Fostex 4" drivers in a line-source/horn design that will ROCK the single-fullrange, hi-efficiency and horn world. I just need someone that will help me make the cabinets and share the vision with me...Tom Scata (thetubeguy1954)

Subject: Re: Some reasons why SETs sound different
Posted by akhilesh on Sat, 11 Dec 2004 23:48:58 GMT
View Forum Message <> Reply to Message

Sounds good! It's all about fun! Looks liek you are having plenty of it. -akhilesh

Subject: "good but not great"
Posted by johnf on Tue, 14 Dec 2004 02:57:52 GMT
View Forum Message <> Reply to Message

It is possible to achieve great set sound for cheap. My friend has built amps that are great sounding. They have come up on audiogon for 500-600. I started with a zen, then heard various diy set amps, some of which were very good.But then by accident, my friend built a great amp, and with the formula almost every amp he built subsequently was great.I posted about it a couple of years ago on audio asylum. The amps use a certain vintage transformer that for some reason gives a great sound. For some reason, the price of these transformers has gone up a great deal on e-bay but i still think it is the only transformer I'm really interested in.

Subject: another iimigrant...
Posted by PakProtector on Sun, 19 Dec 2004 13:16:18 GMT
View Forum Message <> Reply to Message

Hey-hey!!!,I think that the discussion has comvered a lot of my opinions on the subject. There are a few things I would like to add.First being that it is quite difficult to get a grip on the quantities to measure. the current set of measurements does show SS with better numbers. I have heard many nice SE amps and don't appreciate their performance. I like PP. Not the traditional, but Class A, and built like the amps which gave SE their reputation as 'best'. HD power supply design, choke input filters, excellent parts...For an amp, adding loop NFB improves the quantities which are measurable...but the amp does not sound the same anymore. Generally it sounds worse. This contradiction leads me to believe that the measurements which show SS as better just aren't the whole story.My PP amps have a lot of NFB, it is short path, plate-to-grid through a circuit called E-Linear. It works quite well IMO. low output z, good freq. response...regards,Douglas!

Subject: Re: Some reasons why SETs sound different
Posted by Steve on Sun, 23 Jan 2005 16:12:31 GMT
View Forum Message <> Reply to Message

HI Tom. Good to see you here. I do have one comment that may shed light on the subject.Are we sure it is the mic or the equipment after the mic? The reason I mention this is because the recording equipment I have seen thus far is far from SET or even PP quality. Usually poor quality SS designs and the ICs are very poor too.Just a thought.Take care buddy.Steve

---

Subject: good until....
Posted by PakProtector on Sat, 12 Feb 2005 11:16:40 GMT
View Forum Message <> Reply to Message

until we put it in the room with one ov mine maybe!(as long as I don't hook up one channel anti-phase, or some other foolishness).Howdy John, good to see you in these partsregards,Douglas

---