

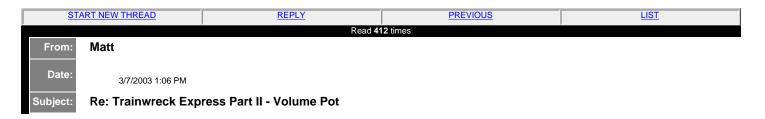
Hey guys, I finally got my Express stable by adding a 500pf cap across the 3rd gain stage plate resistor and using a split plate resistor on the 3rd gain stage as well.

Now here is my problem. I have an AWESOME sounding Van Halen sound when the controls are dimed, but I can't get the gain out of the amp when the volume is on 1 or 2. I have played with using a split plate resistor on every gain stage in an attempt to tame some of the gain, and while the split plate resistor works very well at dropping the gain on the second gain stage and delivering a good clean sound, when this happens, the high volume VH sound is lost.

Also, the amp does have a great clean sound when the Van Halen sound is there, BUT it is only there for a fraction of the lower volume settings. In an attempt to solve this, I went from a 1MA volume to a 100KA pot and this helped with the travel of the volume, but the amp sounded "squashed"; it didn't have that great clean chime to it.

What I'm looking to do is have this amp be clean and chimey at lower volume settings and then be a VH clone when maxed. Do you guys have any ideas on how to get this?

Thanks always!



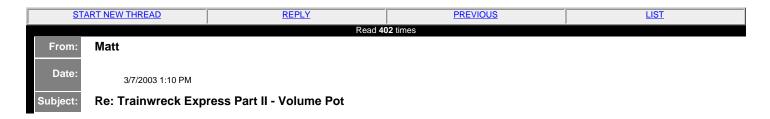
There are different tapers to some of the "audio" taper pots. Maybe a different tapered 1M pot would help? I don't what pots have what taper, maybe someone who does will chime in.

Also, I think that the volume pot is part of the RC filter with the coupling cap. By lowering the value of the pot, you raise the rolloff frequency of the filter. That may be part of the "squashed" tone. I have tried lower value volume pots (500k in a Marshall, also to tame it from ramping up too quickly) and I didn't like it either.

Did you get the hiss under control?

HTH

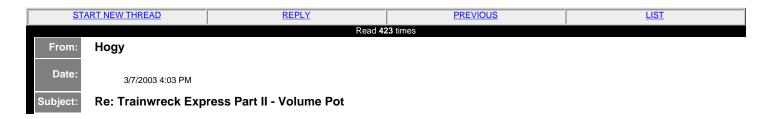
Matt



Oops!

...part of the RC filter with the coupling cap,

I forgot that there is a tone stack there instead of a coupling cap (Marshall on the brain). Still, I think the same basic concept applies (i.e. lower value volume pot = less lows through that stage).



Ken Fischer used a certain brand of pot that is no longer being manufactured. He was quite partial to those, as no other pot has the right taper. An Express done right has a gorgeous clean tone that's adequate in volume.

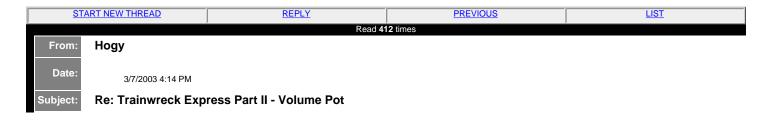
The point of the amp is that as you crank your guitar volume, the amp goes from sparkling clean into full blown distortion without getting much louder. If you have no clean headroom, you did something wrong. There are no split loads in an Express, and no parasitic suppression caps, not even any shielded wire. The amp will only sound right if it is stable, dynamic, and clean without those "crutches". By "right" I mean like a Trainwreck Express. I'm sure all your tweaks resulted in a fine sounding amp, but an Express it's not.

That's where everybody seems to struggle, even the commercial cloners. It's not that hard to build a high gain amp based on the Express, but capturing the seamless transition of an original is a different story altogether.

The circuit is deceivingly simple, but very hard to pull of, as absolutely everything matters and makes a difference. Don't forget that this amp was designed around certain vintage tubes and speakers, all of that is part of the equation.

Finally, did you put the amp on a scope to measure the output before clipping? You should get more than 30 Watts of clean power, without any gain reducing or stabilizing tricks.

Hope this helps, Hogy



One more thing:

Trainwrecks hiss. Ken likes to scare people by listening to the hiss and identifying the brand of preamp tubes in the amp. Apparently a Bugle Boy hisses differently from, say, a Mullard.

To really get this circuit right you have to be able to hear tiny nuances and understand where they're coming from, what role they play in the overall symphony, and how to make them do what you want them to do. 10 tiny little changes that are barely noticeable by themselves add up to a different amp altogether before it's over.

Hogy

START NEW THREAD		REPLY	PREVIOUS	LIST		
	Read 394 times					
From:	MarshallPlexi					
Date:						
Date.	3/7/2003 4:54 PM					
Subject:	Re: Trainwreck Exp	ress Part II - Volume Pot				

This begs the question, is there a REAL schematic available? Of the ones on the blueguitar site, which is most accurate?

Thanks Hogy.

START NEW THREAD	REPLY	PREVIOUS	LIST		
Read 397 times					

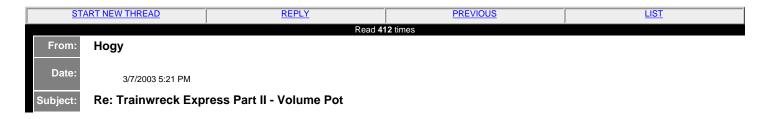
From: MarshallPlexi

Date: 3/7/2003 4:58 PM

Subject: Re: Trainwreck Express Part II - Volume Pot

I am using schematic A1a - is that anywhere near correct?

Here is the link to that schematic: http://www.peasterpipeline.com/test/wreckexpress.gif



There is no real schematic. The ones on the Blue Guitar site are all different versions of the truth (to some extent). Ideally, you'd build a basic Express that's stable and functioning as intended. That means no split loads, no tube shields, no shielded wire, no snubber caps, no attenuating series resistors, yet no oscillations. Experiment with layout, component spacing and direction, wire. Then you'd add a great player, a killer cab, your favorite tubes, and tweak to taste. All the tweaks are going to be minor and accumulative. If all of that works out, you'll have an ungodly good amp that's very finnicky. Sometimes even original Trainwrecks will work flawlessly with one brand of output tubes, and oscillate with another. If there's any magic here, it's building so close to the edge of stability without crossing the line. Very very hard to do.

Not to discourage you or anybody else, but it is easier to build a great JTM45 than a mediocre Express. It's just a difficult amp to get right, in fact, I've never seen it done. A friend of mine has built the best Express based amp I've heard, but he too had to make so many changes that it barely resembles an original circuit anymore. It does sound killer, though, just not like an Express.

Hogy

STA	ART NEW THREAD	REPLY	PREVIOUS	<u>LIST</u>		
	Read 406 times					
From:	MarshallPlexi					
Date:	3/7/2003 5:32 PM					
Subject:	Re: Trainwreck Exp	ress Part II - Volume Pot				

Is this schematic close?

http://www.peasterpipeline.com/test/wreckexpress.gif

Is there anything there that is obviously wrong? Thanks Hogy!

START NEW THREAD		REPLY	PREVIOUS	LIST
		Read 40	07 times	
From:	Hogy			
Date:				
	3/7/2003 5:39 PM			
Subject:	ect: Re: Trainwreck Express Part II - Volume Pot			

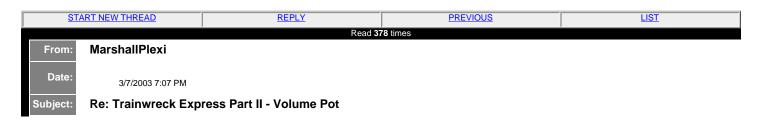
There is nothing obviously wrong. I see three minor mistakes that are not going to make or break the amp and could be variations on a theme. You could build an authentic Express from that schem. Just add a few decades of experience and a set of very special ears and you got it.

Hogy

START NEW THREAD REPLY PREVIOUS	
	<u>LIST</u>



I will personally mail you a crisp \$5.00 bill if you will tell me what those "3 minor mistakes" are. Heck you don't even have to tell me what is correct, just tell me what needs to change and let me be creative!

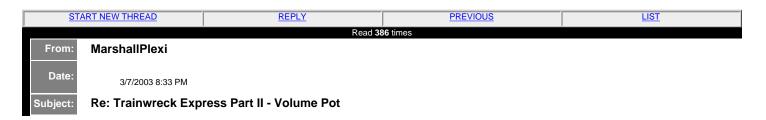


Okay Okay!!! \$6.00 but that's as high as I'll go!



It doesn't matter, there's so much more to that circuit than a piece of paper will tell you and that's what Hogy trying to get at. Each Wreck I'm sure is tuned slightly from amp to amp to match whatever KF ears tell him to do so there is no two the exact same only examples of a particular amp. Use the schems as a starting point but let your ears decide what's best. That's what I finally learned and ventured out on my own and found the closest thing to the perfect amp. Still not there but the soldering iron is still warm......

bwilliamson boxerboards.com



I truly believe that if you can measure it, then it can be recreated.

The Komet amps are designs of Fisher's and from what I hear, they are just a variation on the Express amp, so does Fisher have to tweak each one? Of course not!

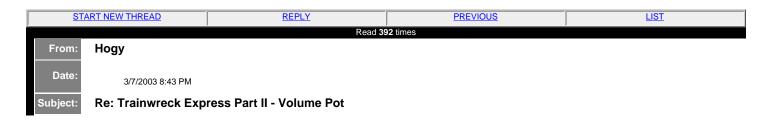
Did Jim Marshall and Ken Bran have to tweak each Marshall? The answer is no. They designed the amp the way it sounded best and then said, "Build it."

I believe that if each of us had the same schematic and the same layout, components etc, our amps would sound the same. Electrons flow through components the same regardless if Ken Fisher solders them in place or Manwel Labor in a factory making \$5.00 an hour. Once an accurate schematic is made, then the process is all but done.

Call me nutty, but I don't believe in Mojo. Either it's real or a person is filing in the cracks mentally because that person has a reason to validate a

certain piece.

But that's just me.



"Did Jim Marshall and Ken Bran have to tweak each Marshall? The answer is no. They designed the amp the way it sounded best and then said, "Build it."

You have an acurate Express schematic.

You built an amp based on it.

It didn't sound anything like an Express.

You are asking the wrong questions and ignoring the answers.

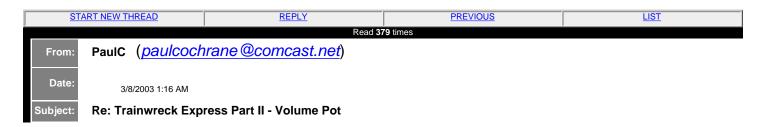
Good luck.

Hogy

START NEW THREAD		REPLY	PREVIOUS	<u>LIST</u>
From:	MarshallPlexi	Read 3	33 times	
	maronam roxi			
Date:	3/7/2003 9:28 PM			
Subject:	Re: Trainwreck Exp	ress Part II - Volume Pot		

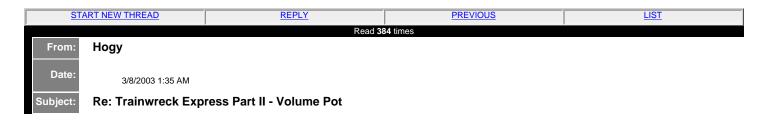
Hogy, I guess I wasn't clear. I wasn't meaning to upset you. I was just saying that I believe that with the same parts, a sound could be copied.

Am I wrong?



It's not about if the parts are the same. The thing is that circuit is pretty unstable by design. Boat loads of monster gain and hi freqs. Instead of hitting a stage kind of hard and then turning it down you've got three sections with the snot being knocked out of them. You've got to get every part sitting in the right direction and spaced just right. You've got to get the wire lengths just right and spaced/angled from each other at just the right spot. The layout is actually more important then the circuit when you think about it. That circuit wont work right unless you nail the layout.

But as to the marshall thing those amps are more stable by design. It's easy to build one and not have any problems. Jim wasn't going for the type of gain that's in an express. If you want that type of open gain you've got to spend the time pushing wires around abunch. PaulC



Paul, I would like to try your pedal. E-mail me with a price, please, and I'll send a check. Hogy



Somewhere in my notes I have reference to a pedal, let's hear more about this. Have a website Paul?

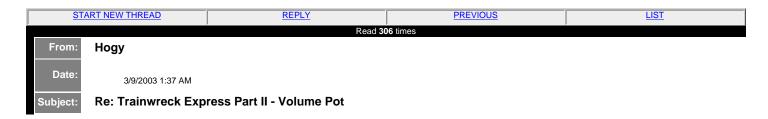
brentwilliamson boxerboards.com



And you are being deliberately "mysterious" and "shifty" about the whole thing. Just help the guy and tell him the three mistakes. Is that hard. He's been asking nice.

No flame just an opinion.

Aharon



It's not mine to give away. Call Ken Fischer and ask him. It's minor stuff that won't help the original poster one bit at this stage of the game. I do regret saying anything.

Hogy



[&]quot;I truly believe that if you can measure it, then it can be recreated."

You have no idea how much I want to agree with you, but it just doesn't seem to work that way. You mention Marshalls, never heard a story of two Marshalls sounding exactly the same. Tolerance, perhaps somebody traced the 'Wreck schem reading the color code instead of hitting the part with a

[&]quot;I believe that if each of us had the same schematic and the same layout, components etc, our amps would sound the same."

meter.

KF seems to be doing lots of things that can't be measured(hear parasitic oscillations come up time and time again), a bunch of us have built this circuit and most have come to the same conclusion. Gobs and Gobs of gain, no real clean. Even the exact clones report the same, Callahan amps were based off of Little Orphan Annie(one of the schems we have-can't remember which one) and from what I've heard and read they sound nothing like a 'Wreck. Bruno has/had a clone and I remember listening to the clips and they didn't sound like a 'Wreck to me, as I recall reading on his website a long time ago that KF talked him through the circuit over the phone.

Heard lots of crazy stories about KF and his ideas, don't want to believe them but there has to be some truth to them.

Tube Shields, sounds crazy to me but read him reference it in several places.

Remember reading a post by Mook who talked to KF on the phone and KF was talking about different head cab woods affecting the tone, HEAD CABS. Can barely wrap my noodle around that one.

Don't believe in mojo either, but in KF case I don't believe that is it. Here's a guy that has taken a circuit and tweaked it to the ninth degree and squeezed everything possible out of it. At which point he starts looking at other factors that to the normal person are crazy but to him logical and quite productive.

Don't know what to tell you, he's doing something nobody and I mean nobody has been able to recreat. Got to say something about him otherwise there would be a ton of people making accurate knockoffs.

Wish I could remember this accurately, there's two types of people-scientific who approach everything well, scientifically and artsy folks who come from the left field bleachers. Who's to say who's right.

brentwilliamson boxerboards.com



a bunch of us have built this circuit and most have come to the same conclusion. Gobs and Gobs of gain, no real clean.

I experimented with the A0 preamp in a S/E 6L6 amp. I even sort of "mimicked" the PI with a very low gain 4th stage, using the leftover half of one of the triodes. The 4th stg was necessary to get the kind of feedback/response I was looking for. Yeah I know, it's not the same thing at all, and I didn't expect it to be. I was just curious about the preamp. I didn't get any decent headroom, and didn't expect it in a S/E design either.

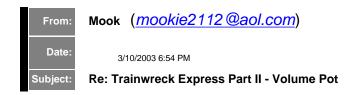
I will say it was a nice little fire-breathing monster though. And I didn't need "clean", the high-freq response was so good the s/c neck pup sounded "clean" even with considerable distortion. It had a very complex freq response. It responded well to guitar vol changes even though it didn't clean up completely.

I'm not interested in cloning and I have no use for a 50W amp. But this was the best sounding preamp I tried in this little amp (until I junked it for something else). I'm going to revisit the idea again with an EL34.

I'm just saying people shouldn't get too hung up in trying to replicate/clone something -exactly-. You should follow your own muse too. I learned a lot from tweaking with this preamp. I've applied some of the principles I've learned to other things with really good results too. I suspect the real magic of a Wreck is in KF's ears and head. But this is a really nice preamp circuit on its own merit.

Doug

START NEW THREAD	REPLY	PREVIOUS	<u>LIST</u>			
Read 237 times						



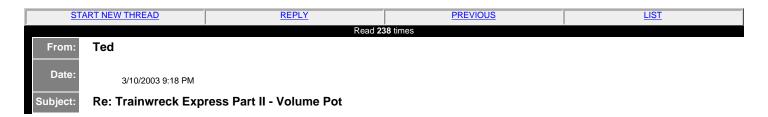
>Remember reading a post by Mook who talked to KF >on the phone and KF was talking about different >head cab woods affecting the tone, HEAD CABS. Can >barely wrap my noodle around that one.

When Ken told me this, I was a non-believer, as well, but know after playing a few different T-Wrecks, (all with different cabinet material - cherry, maple, etc), I *DO* believe.

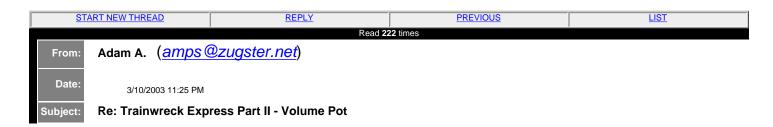
EVERYTHING.....and I *DO* mean everything that goes into making a Trainwreck amplifier alters the tone.

Mook

Ted



Don't want to start a flame war here, but I just have a simple question. What effect do you think using different woods for the contruction of a head have on tone? By what mechanism is this allowed to happen? I have been following T-Wreck threads for quite some time and there is too much mojo,voodoo BS regarding these amps. Even Dumbles do not approach that level of voodoo. I am not bashing Ken. I have never played a Wreck. I am sure they sound great, but I just want a couple of things clarified. Component types used make a difference. Fine. Component layout makes a difference. Cool with me. Lead dress. No problem, I know it makes a difference. Head cabinet wood?!? Prove it. You played different Trainwrecks with different cab woods. Were all of the circuits 100% identical? Was the only difference the wood used for the cab? So, now someone claims that KF can identify which type of preamp tubes were used by listening to the hiss. Funny, but I always thought that tubes were fairly wide tolerance items. They are not consistent enough for anyone to do this. I am not doubting anything anyone has said, but, prove it. This Trainwreck worship is out of hand.



I don't find the cabinet wood thing *that* far fetched if the amp is a head sitting on top of a speaker cabinet. I mean, we all know about microphonic tubes right? What if vibrations to the tube structure could have audible effects below the point at which it causes uncontrolled positive feedback?

In that case I'd say different woods which resonate differently could have an affect, because vibrations from the speaker will be transmitted back to the tubes through the cabinet. That seems to make some kind of logical sense to me.

Of course, I would want to do a literature search through technical journals from the tube era to see if anyone mentioned anything like that. A paper

entitled "The Effects of Vibration on 2nd Order Harmonic Distortion in Voltage Amplification Triodes" would convince me nicely Unfortunately, doing that kind of lit search would take a lot of leg work and access to physical sciences libraries that I don't have.

Now, if the head is isolated from the speaker, then I have *no clue* how that would work. I do agree that the voodoo factor around Ken Fischer has reached what I regard as just silly levels, but I also agree with Hogy's point that there's a lot to be gain from tuning a circuit.

-Adam

START NEW THREAD		<u>REPLY</u>	<u>PREVIOUS</u>	LIST		
	Read 223 times					
From:	Ted					
Date:	3/10/2003 11:57 PM					
Subject:	Re: Trainwreck Exp	ress Part II - Volume Pot				

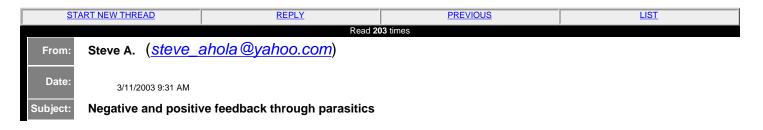
I totally agree with you Adam. We can always learn something new, especially from someone like Ken Fischer, and that's a nice theory concerning the head cab wood, but it's not proof. Good tubes are not microphonic to any large extent; they are not pickups. When they become pickups, we toss them. I make guitars for a living and I hear all sorts of ridiculous things. On a very tiny, microscopic level it all makes a difference. Playing a Trainwreck with the front of the amp pointing north probably sounds different than if the amp were pointing in any other direction. This whole Ken Fischer-Trainwreck thing is going even beyond audiophile territory. And notice, Mook says that everything makes a difference in a Trainwreck, not in guitar amps, thereby elevating them to a status above all others. This is crap and I don't buy it for a minute.



I agree there is a lot of nauseating boogaloo thrown around about these amps, approaching "tubescreamer" levels.;-) This discussion has been enlightening however. It sounds like positive feedback right below the instability threshold plays a major role in the tone. That explains a lot: no 2 amps the same, importance of lead dress, each individually tuned, the schem is not the whole story, etc, etc. So it gives some context and perspective to what at one time seemed like a bunch of hype and audiophile mythology to me.

The positive feedback idea is interesting. I've seen it used in some pedal circuits for example as a way of adding some liveliness to the tone. I think there are some ideas in these amps (sometimes just the schems) that can be applied elsewhere with good results.

Doug



Doug:

It sounds like positive feedback right below the instability threshold plays a major role in the tone.

That's what I had been thinking—but the unadulterated Express design has more gain than you need. So what if the component layout utilized **negative** feedback through parasitic interaction between the various components and leads to reduce the gain without resorting to added resistors or caps? Or possibly a combination of positive and negative feedback in different areas of the circuit...

I believe that all of Ken's handbuilt Trainwrecks used perfboard which would allow the components to be moved around until everything was "just right". With a fixed board design you are somewhat limited in what you can do with the lead dress, basically just moving the wires around.

--Thanks!

Steve Ahola

P.S. In reference to the original post here, I don't believe that the specific taper of the volume pot is that critical because once the amp volume is set properly you would use the guitar volume control to dial in the desired amount of gain and distortion. A special taper might make it easier to adjust the amp volume but I think it could be done (albeit less elegantly) with a typical 10% audio taper pot. If someone managed to get the rest of the amp



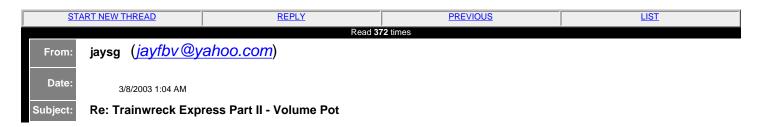


That's what I had been thinking— but the unadulterated Express design has more gain than you need. So what if the component layout utilized negative feedback through parasitic interaction between the various components and leads to reduce the gain without resorting to added resistors or caps?

That's funny because with my little s/e experiment I had no oscillation problems at all. I did use shielded cable from the jack to the first tube grid-just a "best practices" thing, not because it was necessarily needed. I did have NFB around the "power" section (4th preamp stg and power stg) and a presence control.

In comparison I did an ax84 Hi Octane (souped up 2204 preamp) with the same basic setup (but no NFB) and had a lot of oscillation problems. I guess my point is I never felt I was fighting instability or anything with the A0 circuit. It does push a lot of highs though.

Doug



Sometimes even original Trainwrecks will work flawlessly with one brand of output tubes, and oscillate with another. If there's any magic here, it's building so close to the edge of stability without crossing the line.

Thank you Hogy. That explains a great deal more than any post I've read on the subject. Wild @#\$&



STA	ART NEW THREAD	<u>REPLY</u>	PREVIOUS	<u>LIST</u>			
	Read 377 times						
From:	Dai Hirokawa (<u>DF</u>	lirokawa @aol.com)					
Date:	3/8/2003 1:58 AM						
Subject:	Re: Trainwreck Exp	ress Part II - Volume Pot					

I believe that if each of us had the same schematic and the same layout, components etc, our amps would sound the same. Electrons flow through components the same regardless if Ken Fisher solders them in place or Manwel Labor in a factory making \$5.00 an hour. Once an accurate schematic is made, then the process is all but done.

Call me nutty, but I don't believe in Mojo. Either it's real or a person is filing in the cracks mentally because that person has a reason to validate a certain piece.

But that's just me.

I think you're kind of missing the point. The sort of exacting know-how and experience that Ken (and his set of golden ears) has is of a proprietary, aesthetic/artistic, individualist nature. I think that is part of Hogy's point. Two people have the same schematic, but since there are these elements mentioned above that aren't so obvious from the schematic, like layout (how exactly do you place parts?, how exactly do you ground?, how exactly do you route wires? Buss here, star there, cross some, twist some, put some close to each other, keep some away from each other, angle some parts against others, how do you figure out how to deal with the instability without relying on "band-aids", etc., etc.). Then you have tube variability, which can apparently have a noticeable effect. It doesn't sound like something very conducive to being mass-produced--like something that could be easily formulated to where any \$5/hour laborer could build one, esp. if you have to experiment with wire placement and such ('course from the mass-production perspective that kind of tweak-intensive design would be a weakness I suppose--but the "weakness" (or maybe difficulty)/magic seem to be the two sides of the same coin here). I've personally yet to experiment with those available net schemos, but it sure is interesting to hear about others' experiences and this sort of stuff about circuits designed "on the edge"!

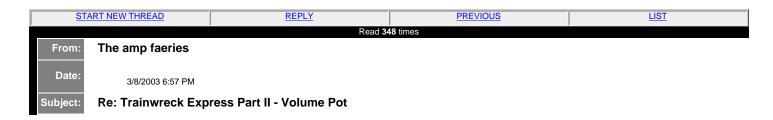
Thanks Hogy for sharing!

Dai



Awwww crap! All this express talk makes me want to go out and build one! Foo! And here I thought I was collecting Humble parts. Sigh....

-Matthew



Gee Brad-is this one of the ones your company will produce?? Questions are one thing, but christ darling, look up SOMETHING yourself-how about starting with "tact"-not a flame, just noticed you seem to flit board-to-board expecting all to do the dirty brain-stuff for ya.



I can understand peoples frustration at not being told all the details of circuits.

I can understand why people don't want to give up the info.

Some time ago, I heard some sound clips of old Marshall amps, and a Komet. The Komet sounded great, but the recording of a Marshall 45 sounded better. My personal opinion.

I sometime wonder why do people get all out of shape over Dumble, and Trainwreck amps. When they like myself probably haven't even heard, or played one.

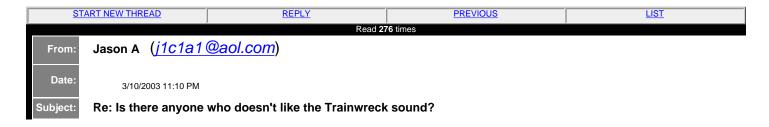
I'm sure most of the "killer" sounds I've heard haven't been done will Dumbles, or Trainwrecks. They are Marshall sounds. Hendrix, Clapton, Beck etc, etc, etc.

Perhaps one day I'll will have a go at building an Express, if it sounds good, thats lovely, if not I'll move on.

I don't see any point in flaming each other over a guitar amp!!

Yours Sincerely

Mark Abbott.



Mark,

I think the Rocket is ridiculously nice--moreso than a Liverpool. The Express is cool, but I personally prefer a nice little cathode follower in the preamp than the three stage Kenny preamp. So, I guess you could say that as much as I love T-Rex, I don't always like that sound...In otherwords, it's not the Be All End All of All Tone, IMO. I actually don't really dig the searing tone all that much--you could get that from a Boogie EQ'ed propely IMO. However, Trainwreck touch sensitivity and clean to intermediate grind is way killer.

Use Cathode Followers: Play Better and Be Happier! Haha!

Jason



Dear Jason

Thanks for the reply. I've seen a lot of threads on this site over the years where people get agitated over details of Trainwreck, and Dumble info.

I hear the usual terms, the EVH sound etc, and I think to myself, EVH doesn't use this amp, and unlike me he can easily afford to do so. Having never heard this amp and, if heavy weight players I know of aren't using them, I ask myself the following questions.

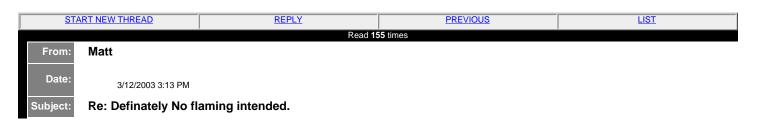
Who uses these amps, and how did they become such an in vogue item?

Maybe the humble Marshall is still the best option?

Got to plead ignorance here.

Yours Sincerely

Mark Abbott.



I think the VH references are made because of the Express tone. The Express clones I built always sounded more like VH1 than any Marshall I've ever played. I realize that Eddie used a Marshall to get that sound but my Expresses just cop that tone better than I've been able to do with a Marshall. In fact, it's the best description of my Expresses I can think of ("sounds like VH1"). Bright and crunchy with harmonics galore. As far as Eddie not using a 'Wreck and could afford to, that's all true. But Eddies tone IMO, totally stinks after 1984 or so. Whatever he is "affording", I don't think I would want any part of it.

Having said all of that Mark, I still usually choose my Plexi and have only retained one of my Express clones (and it was the one with the best clean tone). So in the end it appears we agree, just gimme a good Marshall.

Matt



In fact, it's the best description of my Expresses I can think of ("sounds like VH1"). Bright and crunchy with harmonics galore.

I think the deal with that tone in general is it's like a treble booster. You are pushing the %@#! out of the highs and upper mids, keeping the bass in check. So you get no fuzz or farting, but a lot of clipping and harmonics. IMO, that's what the "marshall" sound is all about.

I think the wreck express ckt takes that to another level. No grid resistors and etc throughout the chain maintains a high freq "sparkle". The more you push the highs, the more interaction you are going to get wrt feedback and sustain, making it more sensitive and responsive. The tone is more complex, which is one of the reasons I think some don't like it.

But Eddies tone IMO, totally stinks after 1984 or so. Whatever he is "affording", I don't think I would want any part of it.

Heh-heh!;-) I agree with *that*. I don't know what he was thinking when he abandoned that early tone. Peavey Schmeavey...;-)

So in the end it appears we agree, just gimme a good Marshall.

The nice thing about marshalls for diy is that they are stable and repeatable. Building something like a Wreck and getting it "just right" (whatever that means) is more of an art form. It's more of a one-off kind of a thing.

I still think that basic A0 circuit can sound pretty nice (even just the preamp) even though you might not get the headroom balance and etc just like the real thing.

Doug



Mark:

Maybe the humble Marshall is still the best option?

With the all of the time and effort we put into developing original or not-so-original amps, it seems like everyone wants to know "does it sound like an old Marshall???"

Trainwreck Circuits was just a small company with Ken Fischer building the amps in his basement workshop in New Jersey, maybe building 150-250 amps over a 15 year period. Not that different from some of the small amp builders here at AMPAGE.

I guess it was in the early 90's that the Trainwrecks became better known through books by Gerald Weber and Dave Funk, and articles in GP, etc.

I've heard from a few people who played through Trainwrecks and most of them were very impressed. It's not just that you can clean up the sound by backing off on the guitar volume control— a lot of amps do that. There is a certain threshold in the controls where the distortion really starts to happen... mark that "Home Plate" in your mind. As you turn the volume up from that point, the level basically stays the same but the distortion becomes more complex and full of rich harmonics. And as you turn down the volume from that point (usually on your guitar) you can get a very chimey Vox-like sound.

The touch responsiveness of the Trainwreck isn't everybody's cup of tea... I really don't see EVH playing a Trainwreck because he seems to go for a more compressed sound. In fact, from various reports it seems like the Trainwreck acts more like an **expander** than a compressor, with the notes "blooming" out of the amp...

As for your question why more pro's aren't playing them, there were only some many of the amps made and just a few of them change hands each year. Some of them might have ended up with collectors so they are just gathering dust but I think that some of them ended up in recording studios. I heard that quite a few of them ended up in Sweden... lots of Trainwreck fans in Sweden!

In addition to the handbuilt Trainwrecks produced by Ken Fischer there have also been his collaborations with Gerald Weber (the Trainwreck Climax amps) and hogy (the Komet amps) but without Ken personally fine-tuning the amps they aren't the same as a real Trainwreck.

HTH

Steve Ahola



Steve,

The Komet sounds very nice--even on MP3. Komet did a good job building soundclips IMO. It has a solid and beautiful tone. As far as the build quality/aesthetics go--it is far nicer looking than the original Trainwrecks or any similar design--including Alessandro, Callaham, Kendrick, Two Rock, etc. Although I could build a Komet at any time for myself, I would definitely consider buying one just because of the inherent beauty of thier work. They did a great job, IMO. I just hope that Komet sticks around in a few years when I would probably decide [and could more easily afford!] to part with \$3.5K+ for a new toy. As it stands, there are too many of my own designs I want to build so my resources would be better served here for now--haha. But later...oh she would kill me.

As far as the tone goes, the Express is a great sounding amp. The only problem with owning a Trainwreck today I see is it's choice of vintage NOS tubes for it work as Ken intended. Back in the 80's, before the huge tube amp boom, these NOS pieces were available and still common. Now they are either too costly or unattainable. I know that it is possible to coax amazing sounds [and comparable to any of the above-mentioned designs] using new manufactured tubes. A vintage dealer in NJ thought I was crazy when I offered to go neck and neck with my EL-34 amp vs. his Expresses [I'd still like to do this!]. Without hearing my amp, he automatically assumed that my amp could not possibly sound good merely due to the fact that I use EL-34 EH's and 12AX7 EH's. Hahaha. I know he is incorrect in this assumption. It would be the icing on the cake if after that I did pop a set of XF2 Blackburns in the amp. Hey, Ken himself commented that the amp sounds great. Another Trainwreck player [Komet and Liverpool owner] thought that my amps have "that sound" but different. A local musician told me that he thought that my amp was the AC-30 of the new millennium. Some pretty good compliments—considering I am just a little basement builder who is obsessed. I use tweaked Plexi/Bassman/Twin/AC-30 style preamps. I know my amps don't do the searing lead that a Trainwreck would, they come close but not right on. They are not designed to do that anyway. But I think I have a better clean to intermediate dirt for my playing style. It is possible to tweak to perfection and get the best you can from the perfectly good newer tubes.

That is what Ken did with the Komet design. It was designed to be able to sound it's best using newer manufacture tubes.

A little bit of secrecy revealed [just kidding around here]: tolerance values matter. Go out and measure a bunch of 100K plate resistors. Some will measure 98K and some will measure 103K as an example. Whatever. You could see a bunch of 100K resistors in a Trainwreck but Ken measures each one and likes to stick with a certain exact measured value [don't know specifics]. So for each particular amp, he may use 100K plate resistors, but he may choose to make all plate resistors 98K or 103K as an example. If you do this for each successive stage, it will make that last 3% of great tone come out--which is where really high performance could possibly live or die. The same goes for any other component.

Jason



Well, thanks for the compliments. I'm honored.

I worked on a few Dumbles that had every EXACT, measured pot value handwritten on the housing. Even the choke had exact parameters (Henries, DC resistance, etc.) handwritten on it. These guys don't just bolt'em together, that's why they're not production amps.

Ken Fischer owns something like five Komets. He uses each for a different sound, selected the tubes, did some tweaks...

I wish I could afford to buy one back.

I'll give away something here, because I like the discussion. Ken likes to listen to an amp (any amp) to see "what the amp wants to be". Then he helps it along on its way, rather than trying to turn it around. He really doesn't generalize much, and the fact that all of his amps have individual names is not just some kind of quirk of his.

Hogy



P.S., see now why it's pointless to ask what three values exactly are different on a schematic compared to one certain real amp? It just doesn't work that way on the Trainwreck level.



Hi Hogy

" Ken likes to listen to an amp (any amp) to see "what the amp wants to be"."

I know at least two amp-builders/tweakers doing the same, listen to the OT and check the plate-voltage.

Have a nice weekend & keep on (building) rockin' (amps)!

Chris

		,	
START NEW THREAD	<u>REPLY</u>	<u>PREVIOUS</u>	<u>LIST</u>



Hogy,

I was talking with Ken last month. We were discussing the lousy acoustics in our basements--where we build/test/play. We both have finished basements with wood paneling. We figured that if we tweak and get an amp sounding great in this acoustically lousy area, that the amps usually sound a lot better in nicer rooms. Another small factor to consider in the pursuit of great sound...

Jason



hogy:

Ken likes to listen to an amp (any amp) to see "what the amp wants to be". Then he helps it along on its way, rather than trying to turn it around.

Like the guys who carve up tree stumps into wooden statues... after looking at the stump for awhile they see the sculpture inside that just needs to be liberated with the help of a chain saw and some chisels.

I think that the same goes for guitar amps... I believe that you can get inside any **decent** amp design (Peavey Classic 30's need not apply!) and come up with some fine-tuning tweaks that really bring out the true character of the design (from your own frame of reference, of course). So whether you start off with a Fender, a Marshall or a Vox design, by the time you are done, it may bear little resemblance to the original, but it could be a really great amp.

Steve Ahola

P.S. I've heard good things about Komet amps, even from people who didn't like the real Trainwrecks! From the reports I've read your amps evidently have "a little more Marshall" and "a little less Vox" in them, at least as compared to Ken's hand-wired amps. It seems like most guitarists these days would agree with your voicing of the amp.



Mark,

Yes, I can agree with the mystical mojo factor regarding Trainwrecks and Dumbles. I think the reasons why they have so much mojo surrounding them is because they were the first real "boutique" instruments, and they have been around longer than almost any other custom boutique amps. And the main reason is because they really are amazing works from the minds and labors of two ingenius individuals. Think about it, Ken Fischer and Alexander Dumble were [and arguably still are] both visionary at their respective times. It happens that Ken Fischer is still presently producing products with his name on them. So is Dumble, but Ken's designs seem more easily attainable and probably a lot more affordable for the average guitarist. Along with the fact that Ken's amps are more well rounded for a lot of styles IMO. IMO, Kens's amps can easily please a wider range of players. Dumble's amps seem more specialized from what I know of them. Not that that's bad. So the mystique factor stems from the facts that both amps were visionary, of high quality, were limited in production, and were built to address very personal aspects of thier respective creators.

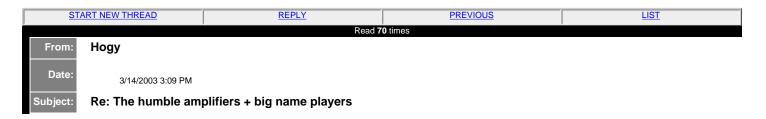
Of course, the humble Marshall, Selmer, Fender, Vox, HiWatt, etc., can also be made to perform at the very highest standards as well. It's that guys like Dumble and Fischer recognized this fact years ago.

One of the reasons a lot of big name players possibly don't use boutique amps is because of endorsements, IMO. Big name artists and their management usually like to be paid big bucks to use a product. My friend who built the cabinets for my amps is also a custom bass builder--Matt @ Acacia Instruments. Some advice I recieved from him was beleive it or not to avoid most big name artists or endorsements if I was ever in that position. He told me stories about how 2-3 big name bass players were interested in his instruments--but they wanted him to give them free instruments and also pay them significant \$\$. I could see cutting them in on a portion of the sales--after all you are using their name. However, they should pay for their instruments, IMO. If they like and enjoy the instrument enough to endorse it, they should properly pay for the instrument. Nothing is free. If the "big name" loved the bass and wanted one, but did not want to endorse it, fine. Pay for the bass and play it and then be selective about who you tell about what instrument you decide to play.

Matt also gave some advice regarding NAMM. He had many experiences where a sales rep would promise to distribute his instruments in all the "big name" stores around the country. They wanted free samples in order to do this. Hahaha!

Most small time builders cannot afford to do any of this nor would they even consider it-especially the fierce capitalists--like me.

Jason



Several "big name players" have recorded with Komets and said in interviews and album credits that the album was done with whatever they endorse.

One huge act has a wall of Marshall cabs on stage. One 4x12 is empty of speakers but houses a vintage AC30. The holes in the cab's baffle are cut so they line up with the two speakers in the AC30, with a mike in front of it. If you go to see these guys you'll be scratching your head about how chimey and rich those JCM2000s sound. Hey, it's all in the fingers...

Hogy

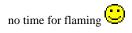


Mark,

One more thing to add: the big guys have a lot more money than the average working stiff. It impressed me that a local guitarist saved for over 4 months to purchase one of my amplifiers. If I never sell another amp, I wouldn't care. I actually made money honestly doing what I love, and that player is very much still in love with his tone. Also, that local guitarist [who is a gigging musician as well] now has a better rig than almost any big name player with thier arsenal of toys--HAHA!

Jason





I haven't tried such circuit (yet) but imho it's possible to build killer responsive amps by tweaking some basic designs to your personal or customer's likings . Start with (let's say) a tweed Champ , tweed Deluxe , Plexi , 2203 or "whatever" and tweak , tweak , tweak .

Chris