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# the ToneQuest Report™

*The Player's Guide to Ultimate Tone*  
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## Nash Guitars



Suspend reality for a moment and consider this — if you could own only one electric guitar for the rest of your playing days, what would it be? Perhaps you have already found your personal 'best' — the one guitar that seems to beckon you over all the others. What makes your favorite guitar so special, and if you set out to reproduce it, is there anything you would change (does perfection exist?) The variables in guitar construction and design allow us to develop personal preferences in body styles, solid, semi-hollow or hollow and body tones, neck and fret profiles, fingerboard radius and feel, pickup types and configurations, wiring schemes, bridge designs, wood species, finishes and decorative details. But only time can provide the experience necessary to truly understand the special combinations of unique features that appeal to us as individuals. The benefit of experience can't be underestimated.

As our collective 'guitar consciousness' continues to expand, so have the choices available to us as players, owners and critical evaluators of instruments. Some players feel the need to be different, first and foremost. The traditional archetypes in guitar design simply won't cut it, and even if they choose to play older instruments, maverick players will find an offbeat vintage guitar that makes a sonic and visual statement. There are players whose entire focus is rooted solely in sound (tone). Steve Kimock comes to mind... if a guitar sounds uniquely, extraordinarily fine, he'll play it with little thought of its onstage aesthetic or the 'cool' factor (although the instrument instantly becomes cool when Kimock plays it). Other players are very rigid in their allegiance to tradition, or at the very least, to traditional tones. Eric Clapton has auctioned off his legendary vintage Stratocasters to support The Crossroads Center, but he's not about to abandon the Stratocaster or the signature tones that his guitars deliver. And there are players who seem willing to go anywhere the wind blows — like Rick Nielsen. Dude is liable to bring anything to the dance and play the hell out of it with total abandon and impartiality. He loves the fat ones, the skinny ones, the uggedly-fuggedly ones and the beauty queens all equally. Nielsen just seems to love guitars, period (and he began collecting them way before most of us had a clue).

So what'll it be? Just as a condemned man places his order for a last meal, what

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would your last guitar be? Think about it, because today, if you can dream it up, somebody, somewhere can build it for you, like the headliner in this installment of *The Quest*, Bill Nash of Olympia, Washington.

We first found Bill Nash on eBay. If you search for certain guitars styles by model

name, a few of Bill's guitars will appear, offered for direct sale by auction. When we first found his guitars we briefly looked and kept surfing, lingered longer over a particular model one day, and then we began asking a few well-placed sources about the quality of Nash's work. Positive comments led to an e-mail, which led to a telephone conversation, and we agreed to develop an interview and build a Nash guitar for review. Nash's work speaks for itself, but becoming a custom guitar builder requires a heady leap of faith — faith in your ability to make your dream become a reality in a business that is not often kind... John Sebastian said a lot of things well, and when it comes to the hard choices in life — like walking away from your cushy day job and building guitars — Sebastian put it best...

*"Did you ever have to make up your mind... Pick up on one and leave the other behind... It's not often easy and not often kind... Did you ever have to make up your mind? Did you ever have to finally decide... Say yes to one and let the other one ride... There's so many changes and tears you must hide... Did you ever have to finally decide?"*

Fortunately for us, Bill Nash left his day job behind and decided to build guitars. Enjoy...



**TQR:** Going back to the very beginning, how did you get involved in building guitars?

I have an older sister, and at the age of eight or so, the records she was listening to were Cream and Janis Joplin and Jimi Hendrix, and that really caught my attention. I used to just look at those albums

and the guitars and the gear and the people playing them, and it was the whole world for me. My hands were too small for guitar lessons, but I used to build little miniature guitars out of clay, and that was my first guitar building experience. And I come from a very musical family. My dad's name is Dick Nash (<http://www.jazzmasters.nl/dicknash.htm>). He is a Los Angeles session musician (trombone) and has been since the late '50s. So I grew up with this in my house. My mom was a singer. My brother Ted is a reed man — a sax and clarinet player. He plays with the Lincoln Center Jazz Orchestra and he has his own CD's out and tours Europe — a real heavy duty jazz guy. But that kind of music never grabbed me like the seriously hard rock stuff. I didn't realize how incredibly hip it was at my house until much later, but there used to be jam sessions and parties where we would have Shelly Mann and Ray Brown and Sonny Criss — real jazz guys, you know?

**TQR:** Did you start playing guitar as a teenager?

I started playing at about 10. Studied quite a bit and played in rock bands. This is Los Angeles in the early '70s — kind of a wild time in the world. I started playing really seriously at 14-15 years old, even doing a little bit of session work and some other things. That's when I started to fiddle with guitars a little bit. As a younger kid riding bicycles and stuff, I used to take them apart and figure out how to change them. I'd be at the welder's shop asking, "Can you move this over there?" I think a lot of builders certainly had a level of dissatisfaction with the instruments that they were getting off the rack. Either they were not made well or they certainly were not set up well and that was what got me twiddling about. Why is the action too high or why is it fretting out? Why do these pickups sound this way? What can I do to make this better? I really didn't pursue that as a builder for a long time, other than doing my own guitars.

**TQR:** Learning how to take it apart if it was a Fender, I suppose...

Yeah, you would have a Fender Telecaster with the three saddle bridge that wouldn't stay in tune, and so now you are starting to do the after-market parts and starting to put the six-way bridge on there and figure out why a different pot is going to make it brighter or darker or what have you. I'm not really sure of when the boutique guitar boom started happening — DiMarzio, Schecter, Mighty Mite — those early days. I think it was right around that time. I actually had a '76 Telecaster that was a great guitar — one of those guitars that they bolted together and it just sounded fabulous. The airlines lost it. That's when I put my first guitar together pretty much from scratch. I found a Mighty Mite body and neck and some other pieces and did my first finishing.

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**TQR:** So you never got the old one back?

No, it was gone. They paid me back for it, but I never found anything quite like it. It was just one of those magic guitars. But that subsequent Telecaster that I built had a solid walnut body and it was very heavy. I played that guitar for 15 years or something, and that was my main guitar. That's where I



really got the bug of building. At that time I really didn't have the facility to build. I was busy playing in bands and working in

music stores, living at my parents' house. I wasn't going to set up a shop and build guitars, but God knows I did enough at the house. There is still paint all over the place at my parents' house. I also had some custom guitars built for me at L.A. Guitar Works. They built a few Telecasters for me and some other things that were really great. I realized then that 'boutique' guitar building thing was for me, even as a player. At that time I was able to start affording better guitars. I was working at music stores, so I got better pricing, and I was learning about doing more elaborate repair work. It was still amazing to me that you would buy a Gibson guitar and it would need a fret dressing. It was odd to me that you could spend that much money on a guitar and it still wasn't right. My understanding with the Gibson necks is that they fret the fingerboards before they are glued onto the neck. Once you glue that onto the neck and they dry, there are some odd things that can happen to the fretboard from underneath. But it was mostly as a player that I did a lot of tinkering with guitars. Then I started buying bodies and necks and finishing, but I was very busy playing and working full-time in a retail music store. All that came crashing to a halt in the mid '80s when I had to drastically change my lifestyle — it was Los Angeles in the '80s and I was in the middle of that insanity. Once out of rehab, I got married, had kids and went into a completely different field and ended up as vice-president of a video company.

**TQR:** Were you also doing work on guitars at the music store?

I did learn quite a bit there about repairs and minor fret work. I was replacing pickups and would do re-wiring and setups. A lot of it was just medium-level maintenance stuff, which I'm still amazed that so many guitarists don't know how to do. To this day, I'm amazed. I will send a guitar out to a guy and he will call me back with questions that I thought he would know the answers to.

**TQR:** Like how to set the intonation.

Yeah, intonation, or neck adjustments with the truss rod. Very basic stuff. I remember when I bought my very first Fender Strat. I read the owner's manual like it was a Bible. I ate that stuff up.

**TQR:** When we have bought guitars that are anywhere from two to six or eight years old, the truss rod has often never been adjusted. The neck might have this huge bow in it, and you look at it and you think it will be interesting to see how this neck reacts when you adjust the truss rod. Sometimes they respond beautifully and sometimes they don't respond well at all. We left you at the video company...

I actually stopped playing for a few years. I was busy with the whole rehab thing after doing a poor imitation of Keith Richard's lifestyle... The only thing I had left of all my old gear was that one walnut Telecaster, and I had *tons* of great gear. We all have stories about the amp that got away. But there is more to life than money, and after about ten years or so of working in the video industry and building a family and a life, my wife, who is the most wonderful, encouraging, loving person in the whole world — she knew I was going to quit this job before I did. She encouraged me to start playing again and spend money making CD's with the bands I was in. In fact, to this day, if you will look at the collection of my own guitars on the web site, all the best stuff comes from my wife. She will buy me any guitar I ever wanted. So I started dabbling back in guitars a few years ago. I was still working as the video executive guy here on the computer and the phone all day long negotiating, advertising with the Best Buy chain for the next release or doing what we do in the video business. I would do this and I would make 14 phone calls and then I would go down to the spray booth and I would be



shooting candy apple red on something and then run back up to the phone and be back in regular business. Then I started buying and selling used gear on the side. I couldn't stay away

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from it, and my wife encouraged me to explore and keep going and start building guitars again. I would buy distressed, used gear — things that needed refinishing or re-fretting. The stuff started selling and then I had a couple of people ask if I would build them a guitar. I walked back into it not knowing where it was going to lead.

**TQR:** Following your heart for a change.

Yes, and not to get too bizarrely spiritual here, but I wanted to be of service to other players. I try and keep that in mind — if I can save someone the frustration that I went through as a player spending God knows how much money trying to find the right guitars. That's really my calling — to get the right guitar into the right hands. It's also part of why I guarantee everything I sell. If you don't like it, I will make it right or take it back. My job is not to stick people with stuff. So then there begins the process — I'm trying to work a straight job as it were, and then building a bigger spray booth and getting the gear to build and trying to work out my relationships with some of the suppliers. It was kind of a fun couple of years there. But you start dreading Monday mornings. Sunday night you start dreading what your week is going to be because you have been building guitars all weekend and having fun with it, then reality hits on Monday when you go back to your straight job. That's no way to live.

**TQR:** I agree. You are telling my story, basically.

I mean, life is too short. Your magazine has the perfect name. We are all these sort of crazy people who would rather read about a 12AX7 tube than what's happening on the latest episode of *Friends*. It's who we are.

**TQR:** When did the notion of aging guitars hit you?

This is the funny thing. I think of the Yiddish saying, "If you want to make God laugh, tell him your plan." My idea was to pretty much buy and sell used gear and make some guitars.

**TQR:** Nice, shiny new ones.



Nice, shiny new guitars. I had seen some Relics out there and other things and a lot of them were pretty poorly done and I thought they were kind of

hokey. Then I happened to drop a guitar while I was building

it. It was a beautiful three tone Sunburst Strat, super lightweight. I couldn't imagine just trashing this thing and saying I'm done, but I couldn't sell this guitar as is. It had marks on it that were not unlike something that would happen on the bandstand, so I aged it. It wasn't great, but it certainly was a lot better than some of the things that were out there. I didn't have any of the current processes in place that I now have. What was interesting is that it sold faster, easier and at a higher price than anything that I had ever built. I was thinking back on how this all happened and I remembered as a kid, before I even touched guitars, building model airplanes and making them look like they had been in accidents. I would take planes and make them look like they had been battles, with bullet holes and burned parts. It is sort of a silly thing, but it's obviously been some strange aptitude I have had to realistically make things look old.

**TQR:** Well, it's an art form and it can be done badly. The same thing Vince Cunetto was talking about — taking pictures and going to guitar shows and each guitar has to make sense in the way it is done. I remember very vividly when the first Relics came out and I thought, "Well, okay, I guess if you are dying to have an old guitar and you can't really get one, that's the way to go," but I wasn't too crazy about the idea. Then it slowly dawned on me after dropping a screwdriver on a pristine custom shop Strat I bought, that another benefit of the whole aging concept is that it takes all the pressure off. You can put your guitar in a stand and leave it out and short of it falling off and the neck breaking, you don't have to worry about every little ding. They happen. And it takes 20-30 years to get all that visual mojo on a guitar otherwise. So it's really liberating, don't you think?

It's absolutely liberating and you never know where this stuff will lead. It was weird, because I first thought that doing



aging was almost sacrilegious. If you've ever finished a guitar in nitrocellulose lacquer and gone through all of that — weeks of building coats and getting it to look like glass... it's very finicky stuff and it's not easy. You build a guitar, and each time you build one and you get it off the buffer and it

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looks fabulous. Just think about doing that and then, *de-evolution*. You go and wreck all that work! That was a weird thing. But what I realized is, the less lacquer you have on a guitar the better it sounds.

I was building a lot of both types at first — a lot of new looking guitars and a lot of aged guitars, and the aged instruments all sounded better. Instead of building up 15 coats of lacquer and then taking it back down, I tried to figure out how I could get the least amount of lacquer on these guitars and still have them look right, and I went hunting around for the right kind of grain fillers that were really organic and didn't soak up any tone. When you are working with swamp ash, there is so much air in it that you have to fill it to make it look right. Now I have a grain filler coat, maybe two color coats and maybe three lacquer coats and I'm done. Tommy at USA Custom Guitars and I will walk around the shop and rap our knuckles on stuff. It's just one of those sort of 'tonequest' things we do, and I will rap my knuckles on a guitar that is finished and it will sound just like it did as raw wood. It's



amazing how nice they will sound. It's a similar thing with the maple necks being too bright. When you take that lacquer off and the surface is no longer shiny, there is almost

no difference in an aged guitar between the sound of rosewood and maple fingerboards.

**TQR:** It's the lacquer that makes the tone harder.

Exactly. It's like playing in front of a mirror. It's so bright and the string is just coming off that shine and reflecting so hard that when you dull those necks out and take a lot of the lacquer out, these guitars just sound great. That is something that I only discovered by doing it. And I began to realize this because of a guy who e-mailed me a picture. He wanted me to build him something that looked like a Keith Richards Tele, but he wanted one that was incredibly beat up with 90% of the lacquer off the guitar. You still have to finish it completely because you can't just spray a little lacquer here and there. But I took the guitar down to almost bare wood and did some staining and did the same thing with the neck. The guitar had a Duncan Antiquity in the neck and a Duncan '54 in the bridge and it sounded fantastic. It is probably one of the best sounding guitars I have ever heard. It looked like it had been in a fire, and it was just because there was almost no lacquer on it whatsoever.

**TQR:** That's really interesting. I just sent someone an e-mail that echoed your comments. The guy had said, "Oh, I loved the Vince Cunetto article, but you know, the whole Relic thing is strictly cosmetic, so what else can I do to improve the tone?" He missed the point a little bit.

And some of the other things, like lacquer on the frets...

**TQR:** When they shoot right over them.



Yeah. I don't have any lacquer on any fret surface whatsoever. It's another one of those little things... Why they

do feel so much better when there is no lacquer on them? It's a big part of trying to get these things to play right. The frets are brand new. There is no fret wear — that's not part of the aging process — but the frets are really well dressed. The necks aren't shiny and sticky. I tend to hone the nuts and cut the nut slots pretty deep and almost buzzing on the first couple of frets. That buzz may come out acoustically, but it certainly won't amplified. Sometimes I will get a call from someone saying the guitar is buzzing and I will ask if they have plugged it in. They plug in and there is no audible buzzing. You can have a little bit of fret rattle and not have it



come through electrically. That's what I look for — that really played in feel. Guys will buy some of these really nice reissues and they don't want to beat them up. They are too scared of them.

They look too brand new and all of that, and this is back to the lacquer discussion... Those guitars are finished in nitro-cellulose, but they still undercoat it with polyester. I didn't realize that until I started taking them apart and aging some of them. I would be working with lacquer thinner and take some of the paint out and then I would get to this level of paint that was indestructible. Once you get into that catalyzed, self-leveling polymer stuff, it's great to work with if you are trying to crank stuff out, because you don't need any wood grain filler. They are taking that step completely out.

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**TQR:** Right, it's great for a high volume production environment.

Yeah, you spray it on in real thick and it cures in a day. It levels all the grain out and it gives you an incredible format to spray your finish over — your color coats — but it can completely suck the tone out of the wood. You take those bodies out and you tap on them and it sounds like you are tapping on a piece of concrete.

**TQR:** Let's talk about the aging process for the hardware. We bought a one year old '63 Relic Telecaster one time and the three barrel steel saddles were so rusted that you couldn't adjust them. The previous owner had broken off the tops of the adjustment screws on two of them and you couldn't set the intonation or raise and lower the saddles because of the rust. Do you take the aging process so far that the hardware becomes almost inoperable?



No. My goal is to get it so it can look just as bad as that but work perfectly. It has to work right. There has been a lot of trial and error on that. On Tele bridges and Strat bridges, I age the plates separately

from the stuff that has screws in it so you won't get completely rusted out saddles. I've got a drawer full of stuff that is unusable from many methods — leaving it in the solution too long. This is an evolving art. I may come up next week and have another idea about how to do this, but it has to look right, and once in a while I do some touch up with air brushing to get it to look even older than it is. Some of the screws and things, if they still look too new but they are working perfectly, you don't want to mess with them. I can take metal parts and in 20 minutes make them look like they were burned down in a Louisiana roadhouse.

**TQR:** It's worth noting that you work with your clients to the extent that if they have a mental picture that they can communicate to you that relates to the degree of the aging that they want, you really knock yourself out to give them what they want.

Yes. I know that this is all a very emotional thing. Guitarists are collectors, but we are emotional people and a lot of what we are often trying to do is recreate a feeling that we had at a much earlier time. It's funny... I never talk to some of my

clients on the phone. It's all e-mail and web stuff. Just amazing. This guy from France e-mails me all these pictures of this guitar (and I have some serious blank spots in my knowledge of current musicians). It turns out it was the guy in the Red Hot Chili Peppers, John Frusciante, who has an early '50s Strat that is very beat up — very distinctly, and he wanted me to replicate it. I pretty much replicated it down to



every wear spot. It took me a long time. I aged the hardware exactly the same way and got it all done and I've done several famous guitars like that. If they can get me the right pictures, there is no reason we can't get it there. It's just a matter of getting enough close-ups of the guitars and

figuring it out. Or sometimes, guys just have an idea — some clients are like, "Make this thing look really beat up," and I never hear from them and I finish the guitar and they say "Great, that's just what I wanted." But some guys are also very meticulous about what they want.

**TQR:** Where do you source your wood?

Yeah, the famous out-sourcing. I realized when I was doing this that if I could get aged guitars in the \$1,000.00 price range, I would have a pretty consistent business. To do that, I



went back and negotiated with several suppliers. My base price guitars are Teles for \$1,000.00 and Strats for \$1,100. Those are All Parts bodies and

necks, which are a really top notch product, but it's very straight ahead stuff. It's like two-piece alder bodies, two piece ash bodies.

Necks come in a few configurations like a soft V, you know, vintage neck or maple neck with a 9.5 radius, but those are the bodies and necks that I buy in bulk. I've always got a bunch of them going on spec and those are the bodies and necks that I can afford to put together and do all of this and

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still sell a guitar for \$1,000.00. There are two kinds of clients — someone who looks at one of my guitars on the web or even eBay — that T52 model which is a 52 Tele, that's what I want and I will buy it for \$1,000.00.

Another guy looks at it and says, "I really like that, but I want a one piece body, different frets, different neck shape..." As soon as we jump out of that base price I go to USA Custom Guitars and in some cases, Warmoth, depending on what it is they are looking for.

**TQR:** Going out and buying a neck and a body and trying to get everything together and assembling it yourself can be a lot more complicated than most people realize. It's fraught with opportunities to screw it up if you're inexperienced.

Yeah, although I will encourage anyone to do it, because it's a fun process. I doubt that anyone that builds one guitar is going to end up with a guitar that they can say, "This is the only guitar I will take out."

**TQR:** It's like anything else, your third one is going to be infinitely better than your first and the 10th one is better than the third...

Plus, to tool up, it's like building an orphaned rug. You have to get fret files, you know?

**TQR:** If you can't cut the nut, then you have to get some one to do it. Reaming out the peghead for the tuners by hand is a lot more touchy than most people might imagine. You go one twist too far with a reamer and it's loose, and then if you try and tap it in when it's too tight... We've been through this.

I remember working on a '70 Strat or something and I was putting new gears in it and the head stock split in half from the tuner reams. Which brings me to the other thing... I do get a lot of calls and e-mails asking me how I age stuff. A

few years ago I would discuss some of it, but there are some things I just don't want to discuss. I got burned a couple of times by exchanging information with someone and next thing I know, he's got a web site up and I'm thinking, "Okay, I'm not doing this anymore."

**TQR:** So does it get to a point where you have to charge more to insure that you have a lighter body?

Yes, and Tommy USA will quote me a price and that price will get marked up and the client gets told what that's going to be. I'm constantly looking at what is out there available out there in stock. Any time I can find light stuff, I buy it. I'm not a fan of ultra-light guitars myself. I think a four pound body is right for me — the way I like to have the guitar sound. I just sold a guitar that was probably on eBay for about two hours — a 6 lb., 6 oz. T52.

**TQR:** People really jump on them.

You know, it was a one piece lightweight body and I said, "Someone needs to jump on this right now because it won't last," and *boom*, it was gone. Guys are always looking for that stuff. I have been successful enough that I turn away certain people because I know they will never be happy. They say, "I need it to be six pounds two ounces," and I can't guarantee that. When I'm building a guitar for someone, I have a spec sheet program. I plug the prices into it and it puts my labor and mark up in and here it is down to the exact dollars and cents. The body is \$278.00 from USA and the neck is, you know, \$159.00 and you are getting Lollar pickups and it all goes into this spread sheet. I will tell you exactly what it's going to be. No questions — no weird stuff.

**TQR:** And if people want figured necks, you can accommodate that.

Absolutely.

**TQR:** Do you offer different wiring configurations, like a master tone control and a blender?

I've done a lot of fun stuff in that area. I build what I call my Super Tele, which is a three pickup Telecaster. The middle pickup is hidden under the pick guard. I redo the neck pocket so the neck angle is different and the strings ride right over the pickguard as long as they can so you get a lot more volume out of that hidden pickup. It looks like a dead stock Tele. On that model, I usually also use the Duncan Vintage stacked pickups with the push/pull pot. They have a high power mode available on them which reconfigures that second coil and pretty much turns those Tele pickups — nice, vintage Tele pickups — into a P90 sound, which is really nice.

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And these Super Teles... I built quite a few of those for guys that want to have one guitar in the stand, but this will get Tele, Strat and Les Paul tone all in one thing. Of course, it's not going to do all of them *perfectly*, but it does a perfect Tele and it does a darn good Strat and it's pretty close to a Les Paul Special. I've built a lot of E-types — Esquire types and most guys do not like the three way switch they had on those. I actually take a mini pot and hide it underneath the control plate. You pre-set it to a second volume so with a flip of a switch you are going to a quieter volume, which is also wired with some extra capacitors so it cleans up really nicely.

**TQR:** What a great idea.

Yeah, if you wanted it to sound louder or softer, you just take the screws out of the control plate and change the setting. You've got a second volume setting without having to mess with it, and a rhythm/lead setting, if you will. I also build a lot of Esquires that have the hidden neck pickup as well. The way I wire Strats unless someone asks me not to is so the first tone control shares the neck and the middle position pickups and then the bridge is the other tone control.

**TQR:** Right. And as far as pickup choices, you have your favorites, however, if someone has something they specifically want to use, that's an option?



Yes, absolutely. The pricing that I have negotiated with my suppliers enables me to do pretty much anything that Duncan or Rio Grande makes in my base model. From there, the sky's the limit. Again, I do a lot with Lindy

Fralin... Lollar is another great pickup... Jake Jones...

**TQR:** The only problem is figuring out what you like.

Luckily, I think this is where my years as a player and also as a collector and someone that has way too many guitars with every possible pickup configuration helps. If I can talk it through or even e-mail it through with a guy, I can usually find the pickup for him. I can help him. You know, a Telecaster is an amazing thing, but it's like a VW — you can make it almost anything you want it to be, from heavy metal to a country western guitar. A country session guy in Nashville, he's going to want a whole different Telecaster than the guy who is playing in a retro '80s punk band. And

there is so much you can do with the pickups. There is some great, great stuff out there. I start with Duncan and Rio Grande. Well, first of all, Duncan makes so many pickups. You put one of his vintage Broadcaster pickups in a Tele, it's going to sound like a great, old Tele. So that's always nice when a guy goes, "I'm not sure what I want. I play a lot of rocking blues, but I want something to sound like a good, old Tele." You put a set of Duncans in there and it's easy. It's when the guys are trying to squeeze everything they can out of a guitar — having something over-wound or changed or what have you.

**TQR:** Or they want the sound of an early 60's Tele, which is a little different.

Yeah, exactly. A little nasal.

**TQR:** What kind of tuners do you use?



Well, I use the Gotoh Kluson copy. They are great. Once again, we are back into a lacquer dis-

cussion. The heavier the tuner, the worse the guitar sounds. That's my opinion and that's being shared with a lot of guys. In the '70s we were all getting rid of those tuners and putting Schallers on, which weighed 500 pounds and we wondered why the guitar no longer sounded like a Strat. The Gotohs are straight-forward tuners, but they sound great. They just sound right for a Strat or a Tele. I certainly use anything from custom Sperzels to Planet Waves.

**TQR:** Locking tuners.

Yeah, locking tuners. But I find even on a Strat that when you are going to use a lot of vibrato, if you have the nut correctly done and the trem set up right, with regular Gotoh tuners you will not have a tuning problem. The locking tuner thing is a bit of a fallacy to me because the nut is where all of your problem is.

**TQR:** That's where you get friction and binding. Don't even get me started on that. We've had some brand new guitars in here — very expensive — and you start tuning them up and *ping, ping, ping*. That's just so irritating.

That goes back to our earlier discussion. I was in a recording session when I was about 17 and I had a Les Paul Custom that I couldn't get to stay in tune. I got so frustrated that I



threw it across the room and broke the neck off. Then I fixed it and I put a different nut on and that was one of my early realizations that the tuning problem was a *nut* problem. I recommend that everyone carry Chap Stick with them and all the nuts I make are lubed with Chap Stick.

**TQR:** What kind of nut material do you use?

The standard thing I use is Tusk, which is like white graphite, I guess. I don't necessarily like bone. A lot of guys like the sound of bone, but it is a spiky material.

**TQR:** Does the Tusk material have a slippery feel?

It is slippery. If you were to look at the stuff microscopically, it's blobby. The molecules are very round and blobby, while the molecules in bone are very spiky, so no matter how you cut the nut, you are still resting against molecules that are spiky. If a guy is using .010 to .046 strings, I cut the nut for about 12-52 and angle the nut down towards the tuner and use lubrication. The less contact with the nut and the freer it is in there, the better off you are. You should never have a pinging sound or anything like that.

**TQR:** I was going to ask you about your fret wire, but why do some companies insist on using what they call that 'vintage' fret wire that is so skinny? It's a matter of taste, but it has no height to it and if you are playing a maple neck in particular, you have too much fingerboard 'feel.'

Yeah, you are dragging your finger across the fretboard. It's a bad thing. And not only that, there is lacquer on the sides of them.

**TQR:** Do you have a standard size fret wire that you use?



I tend to use 6105 Dunlop wire. It's not super wide, but it is very tall and it enables me to really whack the frets down when doing the initial fret dressing and get them really uniform and very nicely done. It tends to be the 'chicken' of all frets. Everyone likes it.

**TQR:** And what about fretboard radius?

Anything is available. The standard models basically come in either 7.25" and 10" radius, but with USA, they make every-

thing. I especially like the compound radiuses that Tommy and USA makes. I have done everything — I just finished a guitar that was a nightmare. It was a scalloped fingerboard with huge stainless steel frets. The stainless steel frets are a bit unforgiving.

I struggled with so many Strats growing up. It was like, "What is the problem here?" and then once the Floyd Rose thing happened — those guitars all sounded pretty bad to me. You put locking tuners on, the locking nut and that giant piece of metal and you are carving out half of the guitar. To me, they didn't sound like Strats, Les Pauls or Telecasters. There was no personality there.

**TQR:** They sounded the way they looked.

Exactly. There are amazing guitars out there built by better people than me. There are guys that do a better job at this than me, but I have my niche. To me, a lot of guitars seem to homogenize the player. They compress the player. They almost have built-in compressor limiters. They don't react well to touch. They don't react well to a player's specific style and personality. We start really getting into the strange magic of this, and that's where it happens for me. You get guitars that are extremely responsive to a particular style.

**TQR:** A guitar should inspire you. It should make you want to pick it up and play it. That aspect is often underestimated.

And a guitar should never have a place on it where you are uncomfortable playing it. I remember playing guitars and I would want to play certain things and I would think, "No, the upper register of the guitar is really crappy and I don't want to go there."

**TQR:** I hate playing above the 12th fret on this thing. It feels great between the third and the seventh fret but when I get above the 12th, it feels like a different guitar.



Yeah, I mean a guitar has to be your ally and not your enemy. Hopefully I can achieve that for people. I

get so many e-mails from guys saying, "I've been playing 30

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years and I have never had a guitar like this.” It’s very nice. I feel like I’m doing what I should be doing.

**TQR:** How many guitars can you build in a month?

I was thinking about this. My capacity is about a guitar a day. I’m not quite at capacity, but I’m getting close. I have to get better at that. The tendency is to want to take a guitar and work on it only — you know, one guitar at a time. You want to see how it turns out, but I have to sort of time it so I’m spraying a white undercoat for two days on eight guitars so I’m being more efficient with my time. And my goal is to never really have employees.

**TQR:** That would change your life.

Yeah. The fact is, if my wife and I want to go camping for four days, I shoot a few e-mails out there and I do it. I have one guy that works for me. His name is Rob and he is basically a guitar lover — he’s a nut like we all are. He is a friend of my kids and he just sort of said, “I’d love to work with you,” and I have him work here — kind of an apprenticeship, but I do pay him and he’s here about three hours a week. My wife has great bookkeeping and office skills and efficiency training. She keeps the other side of it going. I tend to create a lot of work for her because I don’t fill out paperwork properly but she now has systems in place. It gets harder because say you have 25 custom guitars going at once and to know what parts are on order, who they are coming from, why they are coming, when they are due and to do that efficiently is really hard for someone like me who can’t pay attention to something for more than five minutes.

**TQR:** What’s the wait from the time someone decides to order one of your guitars and you settle on the specs?

It’s about six to eight weeks, which is very fast. The only thing that can change that is like with USA Custom Guitars. They have an ebb and flow to their timing and right now they are at about eight weeks to build a neck, so that throws my usual six to eight weeks completely out. That six to eight weeks allows for about two weeks to get stuff from sup-



pliers. If I have the body and neck in-house, I am about a three week build. The only problem is if I have to wait longer for those things.

If I can spray a bunch of bodies — if I’m doing four bodies in Lake Placid blue, I will do those four bodies and once they are dry enough, they come out of the booth and if I’m just doing final touch up on someone else’s guitar, you know, otherwise, I would have everyone’s guitar on the same day. But I try and get those processes on that stock stuff kind of ready to go.

**TQR:** I love how you have developed the web site so that your customers can watch their guitar being built online.



That started because I had clients overseas. I think it was a guy in Italy that e-mailed me and wanted me to build him a guitar and I used to take pictures and I e-mailed him, but finally, with the time differences and whatever, I thought

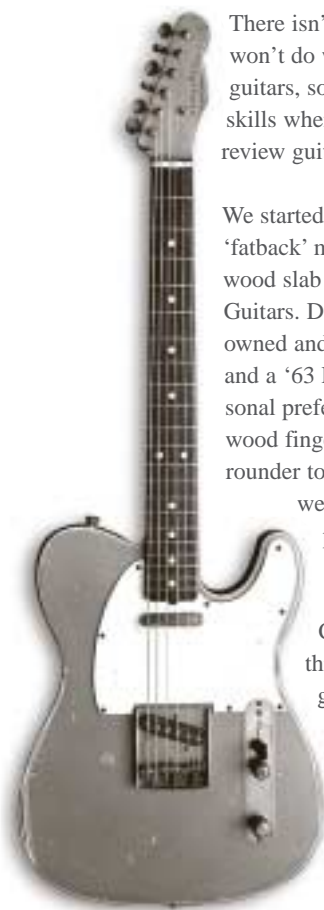
I’d put a web page up. I’m going to build my own web site and so I just decided to have a separate page. That’s what I started doing with all the clients so they get to watch the body and neck come in as raw wood and see the initial finishing, the grain filling, the color, and really get finely tuned. I will go back and forth with color. You tell me what color a ‘blonde’ Telecaster is. There are so many different shades. Everyone has a little different idea. Once again, we are trying to recreate that feeling we got as a kid and he may have been looking at a ‘56 Tele and not a ‘52 and it’s very different, so on the web, I can do that and the guy will say, “Yeah, I would like a little more opaquing on the grain,” and I will shoot some more pictures, throw them up there on the web and the guy will say, “Yeah, that’s it,” or “Can you get more grain or more wear or more this or that or less this or less that?” And the fact is, we can. I can get it to a certain point, take pictures, show them and say, “Is this the right direction?” No, yes, whatever — more green, gray or whatever and get that done and it makes it really good. I don’t know anyone else that is doing that and it’s been just a fabulous thing. These people feel like they are really part of the process. **To**

Nash Guitars, [www.nashguitars.com](http://www.nashguitars.com)  
Toll Free 1-877-GUITAR6 Int’l 360-753-6124



# Nash guitars

## Timewarp Special



There isn't much that Bill Nash can't or won't do when it comes to customizing guitars, so we took full advantage of his skills when we created the specs for a review guitar.

We started with a bound alder body and 'fatback' maple neck with a dark rosewood slab board from USA Custom Guitars. During the past three years we've owned and played two Relic Nocasters and a '63 Relic Telecaster, and our personal preference has leaned toward rosewood fingerboards and the slightly darker, rounder tone of the '60s Telecasters, but

we also wanted the heftier neck profile found on the Nocasters. This time, we chose a bound alder body with the fat USA Custom neck, and as expected, this guitar produces a much bigger, heavier tone than the typical spank and top end zing we associate with swamp ash guitars with maple fingerboards. This guitar creates a uniquely addictive, thick blues and rock tone that makes it really hard to put it down.

We attribute much of this special vibe to the girth of the 'fatback' neck. It's a handful and a half, but if you can work with it there are definite rewards. Combined with the thick rosewood fingerboard, the guitar seems to acquire the character of a lapsteel with a body attached, and you can feel and hear the enhanced sustain and resonance. The alder body also resonates differently than ash; string vibration seems to be more evenly distributed on this body, and it's a throatier, lustier tone overall.



Bill wired the guitar with a 4-way switch using a pair of Jason Lollar's Tele 'Special' pickups and 250K pots for neck, neck/bridge, bridge and combined out-of-phase tones. With a clean amp you can get

very close to the tone of a jazz box on the neck pickup, the

combined neck and bridge tones are predictably stellar rhythm settings, and the bridge pickup alone can range from the quintessential Telecaster tone (with very pleasing, musical highs that aren't in the least bit shrill) to a very convincing P90 tone with the tone control rolled back a few ticks. We were actually able to duplicate the classic sound of a vintage Les Paul bridge humbucker with the Lollar by bringing the tone control down to about '7' and using a Klon Centaur on clean boost (Gain on '0', Treble at 12 o'clock and Volume at 11 o'clock) through our 'CF Martin' DeArmond 1x12 amp. The same settings also produced similar results with our blackface Deluxe Reverb, Marshall 50W and our blackface Pro Reverb. The Marshall Lead & Bass 20W and our Balls M18 didn't need the Klon to nail the 'burst tone.



The Nash Timewarp Special is just that in terms of its appearance, which is old, played and oozing funk. The aged and dulled gold finish falls in-between classic Fender Aztec gold and a Les Paul goldtop — a color that never truly existed on a new Telecaster of any vintage. We call it 'pawnshop gold.' Add yellowed and chipped, aged binding and the look really stops you cold. The finish is nicked, dented and otherwise worn to expose the white primer coat and occasionally the bare wood beneath. Other aging details include a heavily aged and stained pickguard, heavily aged hardware (although the saddle adjustment screws are actually rust-free and work flawlessly) and aged tuners and strap buttons. The lacquer on the back of the yellowed, tinted neck is also worn down to bare wood from behind the nut to the 7th fret. The Dunlop 6105 frets are slightly wider and considerably taller than typical 'vintage' wire found on new Telecasters. Combined with the standard USA Custom compound 7.25"-9.5" fretboard radius, the frets dress out with a nice high crown and string bends are a breeze as you progress up the neck.



Bill chose to install an Earvana compensated nut, which is designed to resolve the inherently imperfect intervals that occur between fretted and open strings. It works. If you wish to delve deeper into the esoteric theoretical nuances of the

Earvana nut, please visit [www.earvana.com](http://www.earvana.com).

The fully assembled Timewarp Special weighed in at 8 pounds even, placing it within the 'super light' category for a Les Paul, and about average for most current production gui-

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tars, but the Timewarp doesn't feel particularly heavy strapped on and it's very well balanced. Again, the alder creates a more substantial sounding sustain and tone that is audibly different from ash. Extremely light weight alder is even more rare than ash, so don't expect a featherweight.



The Timewarp Special is a very special guitar with tons of unique tone and character.

Bill Nash clearly gets it... our instruments can and should inspire us, and the Timewarp succeeds at every level. The good news for you is that your personal one-off 'dream guitar' can be built in Olympia, Washington in virtually any configuration you can imagine by a true craftsman who cares enough to dedicate personal web space to your work in progress. We've never had it better. **To**

[www.nashguitars.com](http://www.nashguitars.com), 1-877-guitar6

## Who's Playing What

Thanks to our good friend and the longstanding guitar tech for Eric Clapton, Lee Dickson, we were able to spend some time checking things out on stage at Philips Arena on the afternoon of the Clapton show in Atlanta, June 18th.



Eric Clapton's gear remains notably straightforward and uncomplicated. His main guitar for this segment of the tour was "Crash-3" — a Masterbuilt Stratocaster with Fender Noiseless pickups and the Active Mid Boost (0-25dB) circuit

first introduced on his signature guitars. This guitar was subsequently sold at the Christie's auction just days after the Atlanta show.

As in the past, Clapton carries a full Leslie cabinet reinforced for touring that has been part of his stage rig for decades. If you've been reading TQR for long, you'll also be familiar with Eric's main amplifier, the Custom 80 built by Denis Cornell in England (see TQR cover story, March 2003). The



Custom 80 was developed as a replacement for the low-power Fender tweed Twins that had previously been built by John Suhr when he was at Fender, which replaced Eric's *original* modified vintage, dual rectifier Twin (see the TQR cover story and interview with the late César Díaz, July

2000). Like the Twin, the Cornell amp is a spartan design that caters to a 'plug and play' fellow like Clapton, and he's been using the Cornell for about two years now, equipped with Tone Tubby hemp cone Alnico speakers (see the TQR cover



story and interview with John Harrison, *The Wizard of Hemp*, January 2002). Eric's tone seemed thicker and richer this time around, where the high frequencies on his

guitar had seemed a bit shrill and tight when he played Atlanta two years ago. In fact, Lee had made the same observation, and it was he who initiated contact with Denis Cornell. Under Lee and Denis' supervision, working with John Harrison at A Brown Soun, the original Tone Tubbies installed in the first Cornell amp were eventually replaced by a new hemp cone speaker with a lighter, copper-clad voice coil. This 'Clapton coil,' as we called it, made the speaker a bit brighter and dramatically enhanced sensitivity, which also eliminated the perceived drop out of certain notes when subtle, low-volume passages were played on stage, which Lee



and Denis had previously noted among all the speakers they had tried. Stay tuned for an update on all of the new developments that have

occurred at A Brown Soun regarding their hemp cone speakers and their pioneering use of hemp ply for speaker cabinets. The testimonials will floor you, and they provide a virtual Who's Who in the world of revered rock and blues guitar

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players... Clapton also had a Fender Woody on stage for a couple of slide tunes played 'woodshed' style with Doyle Bramhall. The grease was plentiful, righteous and good. Eric's

effects are limited to a Dunlop Classic wah and a Mike Hill pedalboard with four switching combinations for his Cornell amp: Leslie on/off, Leslie Speed (fast/slow) and both the Cornell amp and Leslie on at the same time. The signature boost circuit in his Stratocasters is also a *major* part of his live sound.

Doyle Bramhall II is another story — check out *his* pedal board... Doyle had borrowed the services of Sheryl Crow's guitar tech, Rick Purcell, for this tour, and Rick kindly gave



us a brief rundown of his current rig.

Doyle's amps are 100W Marshall Super Bass heads with custom-built Marshall 2x12 cabinets loaded with G12H and Vintage 80W speakers, and a rare (we want one) vintage



Gibson GA-40T 'Les Paul' model tweed amp with variable tremolo. **TQ**

## Ultimate Attenuator

*You'll notice a gold Ultimate attenuator sitting atop one of Doyle's Marshall heads... Peter Stroud first introduced us to one of Mark Gregg's early Ultimate attenuators, and in less than a year they have caught on quickly with many experienced and exceptionally accomplished players. We contacted Mark and asked him a few basic questions about attenuators in general and the Ultimate specifically:*

**TQR:** What are the inherent shortcomings of attenuators?



Attenuators are often a compromise tonally and dynamically. They generally add

sonic artifacts that can go from undetectable to dramatic depending on the amplifier and attenuator. These artifacts can include compression, distortion, loss of high end and low end, fizziness and lack of dynamics and depth. I find under most conditions that I prefer the Ultimate Attenuator to front end or "canned" distortion such as master volumes, distortion and modeling devices.

**TQR:** Can attenuators damage an amp?

A properly working, well-designed attenuator will not damage your amp any more than a speaker load. I believe that the well designed load is actually *less* stressful to your output tranny than a speaker load. I own a '67 Marshall JTM 45 Plexi that had a failing output transformer. When we had it hooked up to the UA or a Hotplate, the amp worked perfectly. It didn't start crapping out until we cranked it straight through the speaker cabinet!

**TQR:** How and why does the Ultimate Attenuator sound and perform better?

The active design is what sets the UA apart from the other attenuators. The load is designed to sound excellent straight in, thus requiring less (or no) circuitry to make up for tonal loss and unwanted distorting artifacts. Also, the actual speaker load and the unit sound identical at any volume, from a whisper to full up. Other designs sound progressively worse the lower you set the attenuation. Another big difference is the ability to set your volume to a specific place with a smooth, continuous volume control without having to settle for -3db or -4 db steps. In the world's best selling attenuator, their most subtle attenuation is -4db. -3db is half volume! That's not precise enough for many applications. The UA puts you in complete control of your volume. And the UA is not only an attenuator — it can be used as a cabinet driver with the wattage doubling switch, which gives you your exact amp tone into another cabinet with complete volume control — great for smaller wattage amps that can't cut it onstage volume-wise. Finally, everything is hand made and chassis mounted and often customized at no extra charge. We pride ourselves on 110% customer satisfaction and will continue to develop our products to reflect our customers' needs. I would like to thank Peter Stroud for all his help in dialing in the final version and for immediately

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recognizing the UA's potential. Peter, you are the coolest guy I know! Current users include: Peter Stroud, Peter Buck of REM, George Lynch and of course, Doyle Bramhall II.

## Review – Ultimate Attenuator

You know the drill... powerful amps sound really big, and most small amps don't, while the definition of "too loud" has steadily trended downward, even on big stages. So, how to get your groove on and still feel the notes without the skull-cracking volume? Attenuators have been around for awhile, but the Ultimate sets a new standard for transparency, flexibility and tone. Now, you don't need multiple units for different amps and speaker loads... You don't need tone controls, because the tone doesn't change, and the perceptible changes in compression, dynamics and feel that we've heard with even the best attenuators are absent in the Ultimate. Your amp sounds cranked and *plays* like it's cranked — the volume is simply lower. We verified all of this first with our '69 Marshall 50W and 4x12 cabinet, which is usually kept at a



volume setting of about '4.' There is a *big* difference between '4' and '7' on the Marshall, and our amp sounded as if it was actual-

ly on '7' with the Ultimate throughout its range of volume. This is good. *Real* good.

We achieved the same results with our very *un-Marshall-like* 40W blackface Pro Reverb. All the subtle beauty of this amp remained intact, from classic Fender clean tones to bluesy breakup, and we were able to maintain the incredibly detailed overdriven character of our old Pro as we slowly brought the volume down to a mere whisper. The standard Ultimate can handle 4 to 16 ohm loads — if you are interested in using it with a 2 ohm Super Reverb or Bassman, you'll need to order a 2 ohm unit. For combo amps, using an attenuator will also require you to lengthen the speaker cable attached to your speakers or build another harness. No big deal. In the meantime, dust off that 100W Hiwatt or old Twin and let it rip. Big amps are back thanks to the Ultimate.

Doyle is a lefty, and he was carrying some interesting guitars on tour. Pictured is his custom-built Fender Telecaster with humbucking neck pickup and F-hole. He also had a couple of single P90 Les Paul Juniors that had been converted to lefties, a couple of SG's and a Les Paul.

The effects in Doyle's pedalboard were both familiar and sur-



prising... Working left to right you'll see the Hughes & Kettner Rotosphere, Fulltone DejaVibe, and two interesting effects — the SIB Echo Drive and the Soft Sustain by Pete Cornish. The blue SIB pedal is one of their early analog models. Rick Purcell mentioned that Doyle had been sent one of the

newer, *digital* Echo Drives (red, not blue). After a brief audition, the analog unit was placed back in the chain and has remained there since. OK... you can now log on to eBay and run up the prices of blue, *analog* SIB Echo Drives.



The Cornish Soft Sustain is new to us, and we're not going to claim to have been able to identify the sound of Doyle's various effects as they were used during the Clapton show. Better to check out

[www.doylebramhall2nd.com](http://www.doylebramhall2nd.com) for a complete discography. One of our all-time favorite Doyle Bramhall II recordings is the 1992 Geffen release by the the

short-lived Arc Angels, with Doyle and Charlie Sexton on guitar and Double Trouble veterans Chris Layton on drums and Tommy Shannon on bass. This album is lush with an array of guitar effects that are used brilliantly.

We've reviewed the Blackbox Oxygen and Quicksilver pedals pictured (see TQR, November 2002), but we had not heard the white RC Booster by Xotic Effects, so we grabbed one from Midtown Music and ran it with all the major food groups — a Stratocaster, Telecaster and a goldtop Les Paul



through our blackface Deluxe. You can coax some 'clean boost' from the RC, but our favorite tones were revealed with the volume and gain settings more or less set around 12 o'clock. Our Strat gained some truly outstanding rhythm grind on the low strings and a bit of midrange push with the RC, although we weren't as pleased with the lead tones on the bridge pickup with the gain on the pedal cranked. On the other

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hand, the #4 out-of-phase tone (counting the neck pickup as #1) can be very nicely emphasized for some classic “Layla” tones. The RC is actually a pretty aggressive pedal, and we had to cut the high-frequency overtones with a Strat, and to a lesser degree with our Tele. We felt that the RC really came into its own with the Les Paul. *This pedal likes humbuckers, kids.* Time went out the window as soon as we plugged in the Les Paul, and we’d still be playing it if we didn’t have this issue to write. Oh, just name your favorite overdriven Gibson tone and you can pretty much nail it with a Deluxe with the volume on ‘4’ (ours anyway) and the RC. The bass and treble controls on the pedal also allow the flexibility to produce the top-end sizzle of Dickie Betts’ JBL’s in a Marshall cab, Duane’s smoother, singing, soaring tone, or vintage Cream (all of it). Xotic Effects are widely distributed nationally, so check out the RC Booster. It’s worth a look.



According to Rick Purcell, Doyle’s Wah was custom built in an old Vox case by a fan and sound-ed good enough to make the cut.

The gold volume pedal is the venerable Goodrich — the quintessential pedal steel player’s volume pedal of choice (it’s designed with a shorter, more precise travel to accommodate seated steel players). We’ve recommended the white Boss TU-2 chromatic tuner repeatedly, as well as the gold Analogman Sunface Fuzz (with germanium transistor). *Get one.* Haven’t tried the blue Chicago Steel Octavian, but we’re going to soon. We have reviewed the Lehle 1@3 switching unit, and they have quickly become standard equipment on big stages within the past year (see [www.europeanmusical.com](http://www.europeanmusical.com)). No comment needed on the Line 6 delay and modulation units pictured — highly recommended as the most convenient and cost-effective means of dramatically expanding your palette of effects.

## EBS DynaVerb

The Swedish-made EBS DynaVerb was completely unfamiliar to us, and we were able to acquire a unit for review thanks to the US distributor, Brooklyn Gear. EBS exclusively builds pro equipment for bass, and in contrast to the Electro-Harmonix Holy Grail reverb pedal we’ve reviewed in the past, the sounds available from the DynaVerb are those of a harder, digital plate reverb effect rather than traditional spring reverb. Settings for the DynaVerb begin with a “Room” reverb mode with three settings for a “small studio room,” “small, warm room,” and “large room.” The second mode is “Plate,” with settings for “Vintage,” “Classic,” and “Clear,”

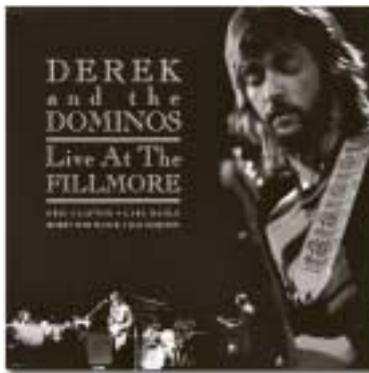


and the third mode is “Hall,” with settings for a “Large Open Hall,” and “Ambience” hall. The DynaVerb can also be operated in stereo mode with two amplifiers or connected to a mixing console in parallel mode and used as a ‘rack’ unit.

The DynaVerb is a very well-made digital pedal with a harder plate reverb that doesn’t deliver the classic

Accutronics spring tone like the Holy Grail, and the vibe is definitely more digital than analog. For bass, we can see how the harder reverb effect would be desirable over a ‘springy’ effect that would cause the bass notes to blur and meander where they don’t belong — but for guitar, we’ll stick with the Holy Grail.

Kudos to Eric Clapton for tapping Doyle Bramhall II again on guitar for the current tour. The show was a powerful mix of Robert Johnson blues and classic Clapton standards like “Badge,” “Layla,” and a particularly energetic rendition of “I Shot the Sheriff,” but the highlight of the show for us was Derek and the Dominos’ “Got To Get Better In A Little



While” which allowed Clapton and Doyle (and his pedal-board) to stretch out with an extended jam that left us slack-jawed and smiling. Eric Clapton is best appreciated live, where, as our friend Roland commented, “He can turn a big

room into a small room like no one else.” We agree. It has been fashionable in the music press to flame EC for having lost the fire and energy that fueled his early career, and today’s crop of music critics clearly do not share Clapton’s reverence for Robert Johnson... but the stripped-down show that EC has taken on the road for this tour reveals all of the magic that is and ever was Eric Clapton, and he is still capable of captivating an audience like few guitarists on earth. **To**

Gear Resources for Tonefreaks

Denis Cornell, [www.dc-developments.com](http://www.dc-developments.com)

Mark Gregg, [www.ultimateattenuator.com](http://www.ultimateattenuator.com), 760-799-2453

John Harrison, [www.abrownsoun.com](http://www.abrownsoun.com), 415-479-2124

EBS DynaVerb, [www.ebs.bass.se](http://www.ebs.bass.se)

RC Booster, [www.prosoundcommunications.com](http://www.prosoundcommunications.com)



## ANALOGMAN

## KING OF TONE OVERDRIVE

The latest effect from Mike Piera is The King of Tone overdrive, which Mike jointly developed with Jim Weider (see TQR, December 2002 — *The King of Tone* cover story). We asked Jim and Mike about the development of the King of Tone pedal, and their comments and our review follow...

**Jim:** Basically, I was unhappy with my TS808. I only used it because it was convenient and easy to carry around, but I would lose too much of the bottom and it was real middy. It sang good, but I really didn't like losing all the



low end. Finally, I decided that we needed to fix that and we started dialing in the King of Tone prototype using my pumped up Deluxe (biased for 6L6's with a larger output transformer). We compared tones with my Deluxe on 4-5, which produces a great lead tone, then we turned the amp down to 2 or so and tried to re-create the sound of the lead tone on 4-5 with the pedal. I think we came really close, and if you were to take this pedal out on the road with pretty much any amplifier, you'll be able to get a really nice clean tone with your amp and a great lead tone with the pedal. Two lead tones, actually. And we were really determined to do this without changing the basic, unaffected tone of the guitar and amp alone. It works really well. I keep the normal 'factory' settings on the internal DIP switches and I leave the internal treble boost turned down. Sid (McGinnis — guitarist on Letterman) is downstairs blasting right now, and he likes to turn his treble boost up a little bit because his tone is a little



darker with humbuckers. He also sets the internal DIP switches all down, because his amp is already compressing and he doesn't need the compression on the Red Channel as much. The Yellow Channel isn't a super clean boost, but it doesn't clip or compress the way the Red Channel does. It just makes the tone fat. With either setting, I don't lose the bottom end anymore, and I'm very happy with it.

We spent so much time working on this pedal and A/B'ing stuff that I'm sure it will cost me a hearing aid somewhere down the road (laughing).

**Mike:** In 2004, there seems to be a very strong following for various new 'clean overdrive' pedals. When we started, there were only a few available, so it was something we thought was needed. We wanted to do what a Tube Screamer did without the drawbacks — basically more clarity and less change in tone. Also, some people needed a pedal that could have more volume boost than a Tube Screamer. You will notice that many people run them with the volume knob up all the way, which means they probably wanted to push the amp even more. The ability to get a clean boost out of the pedal was not our original plan, but we found the clean mode to be even more useful for many people for whom a Tube Screamer could not get clean and loud enough. We had tried every tweak imaginable on the Tube Screamer circuit, and the best we came up with was our Silver Mod, which sounds awesome, but it's still essentially a Tube Screamer. Any mod that give the TS more low end than our Silver Mod will make it too flabby, so we started with a different design. It still uses a dual op amp and diodes for clipping (in OD mode) but we don't put the diodes in the op amp feedback loop in parallel with the drive knob like the Tube Screamer.

After deciding on the specs and tuning it with Jim, I did a few more tweaks and found a Clean Mode which was extremely toneful and could be added to the pedal without much extra cost. Then I discovered the Distortion mode, which would allow the harder-rocking kids to have fun with the pedal too, especially when used with a huge amp with tons of headroom. So we had several useful modes and came up with a



way to package them all on a small pedal with various DIP switches, which you explained much better than I could!

We are totally satisfied with the tones, which are still the same as the Serial#1 pedal that Brad Whitford is using with Aerosmith, but we are constantly tweaking for ease of use, better calibration of pot tapers, switches, etc. Next, we will try to make it even more usable and flexible without having to raise the price much...

Analogman's trademark approach to pedals has always seemed rooted in building versatile tools that do not rob you of the tone you have created with your guitars and amps... no bass drop-out, screechy high frequency overtones, overbear-

-continued-



ing midrange push, or noise or interference with other devices in your rig. And the tone controls always work extremely well... As we expected, when we first powered up the King of Tone and toggled back and forth between the red and yellow boost channels and our unaffected Deluxe, the essential tone did not change. The Yellow Channel (clean boost) merely fattens up your tone quite nicely. Granted, we did hear the A and D strings on our Telecaster jump forward a bit on an A chord, so there was a change in emphasis, but the tone remained unchanged. Switch to the Red Channel and the previous 'Yellow' tone gains an edge with more gain, distortion and compression, but the combined tone of our guitar and amp was still preserved. Whenever gain is significantly increased with an amp or a pedal, there is a perceptible roll-off of high-end, and we were able to counter this by adjusting the tone control, or by permanently re-setting the internal treble boost pot inside the pedal. Just a slight clockwise turn did the trick, and this internal control is especially useful for dialing in high frequency emphasis with different amps, guitars and pickups. For example, the stock settings were fine with our Deluxe and Fender single coil pickups, however, when we switched to P90's or humbuckers, or a Fender guitar with a Marshall amp, we would boost the treble to offset the darker tone of this gear, and it worked brilliantly.



The internal DIP switches enable you to create your own, *custom* King of Tone. The

'factory' settings provide Overdrive (Red) and Clean Boost (Yellow) channels that share the same Drive and Tone controls with separate Volume controls for each channel. By moving the DIP switches, you can create two Clean Channels using different volume settings for each, or two Overdrive Channels with different volume settings. A single footswitch determines which channel is enabled, and a second footswitch turns the unit on or off (with true bypass).

The entire process of dialing in the King of Tone with various guitars and amps is really quite simple, straightforward and incredibly rewarding. Once again, Mike Piera and Jim Weider have brought their considerable experience and insight to bear in the creation of an overdrive pedal that earns its name in spades. We strongly recommend that you contact Mike Piera and just say, "King Me!" There is a bit of a wait for the King of Tone, but ToneQuest readers will be rewarded with free shipping when they reference this article. **To**

[www.analogman.com](http://www.analogman.com), 203-778-6658  
[www.jimweider.com](http://www.jimweider.com)



The last time we devoted significant space to the C.F. Martin company (nearly an entire issue — see TQR, May 2001), we received a memorable e-mail from a reader who said, "I didn't subscribe to the ToneQuest to read about acoustic guitars..." Fine. How about a C.F. Martin *amp*? In 1961 Martin introduced the 'F Series' of electric arch top guitars with DeArmond pickups, and in 1979, the 'Style 18' electric solidbody guitars. Martin's attempts to carve out a niche in the electric guitar market were less than successful, but as the F Series was being developed, someone apparently had the bright idea to re-brand a few DeArmond amplifiers built by Rowe Industries in Toledo as 'C.F. Martin & Co.' amps. The standard DeArmond

copper tolex and control panel were changed to black and silver, and one of the ugliest grill cloth designs we have ever seen was created for the 'Martin' DeArmonds. Otherwise, the cabinet construction, chassis layout and circuit remained unchanged from the original DeArmonds



Thanks to our pal and zany Montana guitar builder, Larry Pogreba, we are now the proud (and permanent) owners of a 'Martin' DeArmond 1x12 amp with dual

6V6's, single 12AY7 and 12AX7 preamp tubes and a 5Y3 rectifier, serial number 'ML9160.' We're guessing that would be number 91 of the lot built in 1960. The amp is completely original, including the original Tung-Sol 6V6's, 5Y3 rectifier, and Jensen P12R Alnico speaker dating to 1959. The speaker



had been reconed at one time and sounded a little sick on arrival, so on a whim we installed the

-continued-





ceramic magnet version of the hemp cone Tone Tubby speaker (the big Alnico Tone Tubby model would have been a tight fit, butting right up against the 6V6 tubes — not good). This amplifier is now the *definitive* twenty-something watt vintage



6V6 1x12. That's right — in our experience, it has no equal. *None*. Why? We posed this question to Jeff Bakos, who had just put the

DeArmond on his bench, plugged in his well-worn Telecaster Custom, hit one chord and with a beaming smile and a reverent twinkle in his eye, said, "That's the shit right there. Oh, yeah... that's the *tone*, man. That's *very* impressive." "What makes it sound so good, Jeff?" we asked. "What makes it



sound so good? (peering into the chassis now). Well, just look at the

circuit. It's the simplicity of the design — no reverb or tremolo pulling the signal down. Just 'Volume' and 'Tone' controls. That, and... (reaching underneath to gauge the size of the output transformer), *holy shit*, Dave. The output transformer in this thing is *huge*! There you go. Simple circuit, ridiculously huge output transformer, and that's a really good sounding cabinet. The Tone Tubby speaker rocks, too. I've never heard one of the ceramic Tone Tubbies before. Yeah, it rocks...."



After 4 years of writing TQR and reviewing amps (and a few decades playing them) we thought we might have heard it all when it comes to vintage 1x12's. Well, we hadn't

— not by a long shot. And perhaps we should underscore the size of the bone we're throwing you here... Look in the *Blue Book of Guitar Amplifiers* and you'll find no mention of a DeArmond or a Martin amp. Check *Harmony Central*... you'll find not a single mention of them there, either. The *Aspen Pittman Tube Amp Book* *does* feature one old ad for the DeArmond R25T (dual 6L6 2x10 model with tremolo, which we've never seen). These amps are completely off the chart and off the chain! If you consider yourself a true gourmand when it comes to vintage amps, or you just like to eat well at the table of tone, hunt one of these bad boys down with a vengeance.



Aside from carefully removing the hideous 'Martin' grill cloth, storing it away and replacing it with Fender 'vintage' cloth from Mojo Musical Supply,

we're leaving this amp alone. It has never been recapped or re-tubed, and Jeff agreed that unless it develops any symptoms that need attention, it should be left as is. The 'CF Martin' DeArmond 1x12 once again proves that the *Quest for Tone* is never, *ever* over. Keep your eyes and your mind open, gang, because you just never know what you may find on your quest. **To**

## POWERTOOLS FROM VIRTUAL SOUND

Most of us aren't sporting a gonzo pedalboard like Doyle Bramhall's, but whether your rig includes three pedals or thirteen, a reliable power supply is essential. In addition to designing his very successful line of effects pedals, Visual



Sound founder Bob Weil actually plays guitar, and he has created a very attractive, economical and practical solution to powering effects that

—continued—



eliminates the need for an expensive power supply. The 9VDC regulated power supply works with 90% of the pedals made today, including Boss PSA, Boss ACA, DOD PS-200R, Morley 9V, Danelectro DA-1, Dunlop ECB-03, Ibanez AC109 and the Zoom AD-0006. The 1 Spot also converts all international voltages. How does it work? You simply plug the 1 Spot into a single outlet (comes with a 10' cord!) and use the multi-plug cables to connect multiple effects pedals. The 1 Spot adaptor can provide up to 800mA of electrical current (a single pedal uses only 50mA- 80mA of power) so you need only need a single 1 SPOT to power your entire pedal board, with no AC hum. At \$24.95 (additional cables not included, but they are cheap) this gizmo will power you up and keep you cooking worldwide at a fraction of the cost of a big, bulky power supply. *Power up mates!* **To**

[www.visualsound.net](http://www.visualsound.net), 615-595-8232

## ToneQuest Reader Mail

Dear David:

As usual, your June issue is full of interesting and informative material. However, one glaring bit of misinformation requires me to comment. Charlie Kittleson includes us with a list of other amp manufacturers, saying we drive the market for tubes (true) but that our "primary qualification... is simply low cost." I cannot speak for the other manufacturers but my insider's knowledge of Mesa/Boogie is impeccable and I can assure your readers that cost is not the primary qualification.



Tone, reliability and availability are the three factors we consider. Cost is barely an afterthought. We have spent over twenty-five years working directly with various tube manufacturers around the world to develop and improve the tubes we (and most of the others) use. Our in-house tube testing and matching apparatus is the latest state of the art, custom designed and built at a cost exceeding \$100,000.00 and it benefits from our twelve prior years experience with our previous system, which was then the state of the art. We make only vacuum tube guitar amplifiers. We know the importance of tube tone and reliability because this is not just our job, it's our life! (I speak collectively because I'm not the only obsessive here!) We tailor our amplifier circuits and transformers to perfect their interaction with the tubes we choose, so we need a long-term commit-

ment from the factories we support that they will maintain quality and availability. Even then, things in the tube world are not always easy or predictable. Materials or processes can and sometimes do change in our supplier's factories. And they always tell us we are the first (and usually the only) amp manufacturer to notice. We carry month's worth of extra stock in our inventory for just such occasions.

The tubes we reject no doubt appear on the market in one form or another, but they definitely do not bear our name or our warranty. Tubes are as important as tires on a high performance car. There is no way we would compromise all our efforts at the last minute to save a few bucks on tubes!

Sincerely,  
Randall Smith  
Designer & President  
Mesa/Boogie Ltd.

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## New from ToneQuest Records



Check out the new CD's and sample tracks at ToneQuest Records ([www.tonequest.com](http://www.tonequest.com)) now! Signed Jim Weider (The king of Tone) CD's *Remedy* and *Big Foot* are in stock, as well as Jim's excellent DVD *Get That Classic Fender Sound*. Ronnie Earl's most recent stellar blues CD's are in stock, as well as signed copies of Danny Flower's exceptional *Forbidden Fruits and Vegetables* featuring James Pennebaker, Bonnie Bramlett and members of Delbert McClinton's incomparable band.



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