# A LEGACY REBORN


*When the family of late Hiwatt founder Dave Reeves went to **Clayton Callaway**'s Vintage Hiwatt Convention, their aim was to prevent others from profiting off the family name. Instead, they became fast friends with Callaway and soon gave his Hi-Tone Amplification venture their only signature of approval.*

BY YOEL KREISLER

Columbus, Indiana. A plain, red brick building lies nestled in an office park, parallel to a strip mall. Tucked away behind a bank and a dentist's office, in the heart of prototypical Midwest America, lives the continuation of an amplification legend as unmistakably British as the Union Jack itself. Clayton Callaway, Mark Huss, and the son of the late Dave Reeves, Glynn, are continuing the legacy of loud that his father began back in 1964.

Originally conceived in 2006 after the trio met at the very first Vintage Hiwatt Convention hosted by Callaway, Hi-Tone Amplification gives form to their drive, dedication, and insatiable love for vintage Hiwatts. Between them, they have owned, played, and worked on hundreds of these legendary amp and cabinet specimens. From the classic, mean and clean DR103 100-watt heads to rare and unique one-offs, the Hi-Tone team left no stone unturned when it came time to researching the amps that inspired their new company. Today, their clients include J Mascis of Dinosaur Jr., Dave Minehan of the Replacements, and Keith Nelson of Buckcherry.

"There are other amps that get relatively close, but we are perfectionists," Callaway says. "We don't skimp on anything. Fortunately we all have day jobs and we're not relying on this to survive, so we're not stuck dealing with price points and that kind of thing—we weren't going to do it unless we did it right."

According to Callaway, Hi-Tone aims to pay authentic homage to the work of the late Dave Reeves in everything from the point-to-point wiring down to the hookup wire. The original, Reeves-run Hiwatt was very much a family business. Big stars of the '60s and '70s used to hang out in the Reeves' living room, and Daphne Reeves (Dave's widow) was known to help Dave build his amplifiers—often in their own garage. Similarly, Glynn, Callaway, and Huss all wanted to maintain the family-run spirit of the original Hiwatt company, while maintaining the standard of bulletproof quality and reliability that Dave Reeves originally envisioned.

On a warm Friday afternoon, we sat down to speak with Clayton about the beginnings of his company, the history of Hiwatt, bringing the Reeves family back into amplification, and his mission to continue Dave Reeves' work.


**Right:** Left to right: Hi-Tone president Clayton Callaway, vice president of R&D Mark Huss, and Glynn Reeves, who sources components in the U.K. and advises Callaway and Huss on circuit accuracy.

**Below:** An HT50 JP and HT2121 cab with Hi-Tone DR-F speakers.


**Who started you on this crazy journey—what was the catalyst for your Hiwatt obsession?**

David Gilmour was definitely one of them. I was always a big Floyd fan, and I like most of the stuff from the Who up until around when Keith Moon passed away. I was starting to do research into both bands about 14 or 15 years ago, and this Hiwatt stuff kept coming up. In Indiana, where I'm from, most of the available gear is Fender, Marshall, Vox, etc.—especially back then, before the big boutique explosion happened.

**When and why did you decide to begin Hi-Tone?**

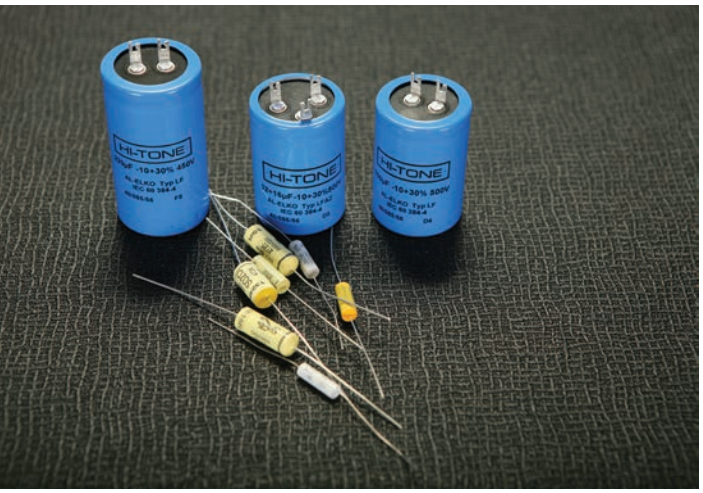
The first time we really thought of it was at the very first Vintage Hiwatt Convention, back in 2006. Glynn and Daphne came, and that was the first time I met them, as well as Mark Huss [Hi-Tone co-owner]. Glynn kept asking Mark when he was going to start building Hiwatts. I'm not sure if he was being at all serious, but that was probably the spark for me.

**Did you and Mark know each other before that?**

We first met in person at the convention, but a couple of years prior to that we had some email contact, because we were both obsessed with the old, real Hiwatts. He's one of the most intelligent people I've ever met. He works in cybersecurity and knows everything about electronics—from 1950s and 1960s technology all the way to the latest and greatest high-tech stuff. He makes me feel dumb all the time [*laughs*].

**How did the convention start—was it started by the Vintage Hiwatt Forum?**

I started the forum a couple years after the convention started. There were a few guys from the old Plexi Palace Hiwatt forum that were talking about having a get-together. I can't take credit for being the original initiator, but there was a





**Left:** Hi-Tone amps use a number of custom and high-end components, including SoZo capacitors (front).

**Right:** The massive, custom transformers that Hi-Tone commissioned from Heyboer after reverse-engineering vintage Partridge models are another key to replicating the headroom and might of vintage Hiwatts.

handful of guys that said, "We need to do this," so I just kind of made it happen.

**Where did the first Vintage Hiwatt Convention take place and what was it like?**

It took place here in Columbus, Indiana, at our local county fairgrounds. I rented one of the buildings—actually, the livestock pavilion [*laughs*]. It was a big, empty building with bad acoustics, but we could get as loud as we wanted and it was pretty secure. We had a pretty disappointing turnout—there might have been 12 guys over the course of the weekend—but I got to spend a lot of good time with Mark, Glynn, and Daphne. Daphne was right there from day one [with Dave Reeves and the original Hiwatts], helping him do basic stuff, and worked in an electronics factory up until a few years ago when she retired.

**You seem to be quite close to the Reeves family.**

That's because of the convention. They initially came to see who was trying to profit from their name. Truth be told, they are pretty disgusted with people trying to claim their name or some kind of association and profit off of it. Glynn and I just hit it off. Obviously we had a lot in common with the amps and a lot of the classic British rock music. He's a pretty down-to-earth guy, and he's even more obsessed than me when it comes to this stuff.

**You're the only amp company endorsed and approved by Dave Reeves' family. What does that mean and why is it significant?**

They take a lot of pride in the amps that Dave was making, and it's a sore subject with them when you have stuff with the Hiwatt name on it that doesn't live up to the legacy. Some of them are better than others, but they still hardly compare to the originals. With me, it took a while—they weren't sure how legitimate I was and if I was just somebody else trying to profit off their name. But I gave them my word when we started doing this that they would get royalties. Actually, now Glynn owns part of Hi-Tone, so they're in it all the way. But from the beginning, every step along the way, I never did anything without conferring with them or at least trying to get their opinion to make sure they were part of the process. I just wanted to do it right. Mark and I don't have any grand illusions of getting rich off of this. Every little bit of profit we make goes right back into it. There aren't gigantic margins in it, so it's a labor of love, that's for sure. Getting feedback from people and players who love them makes it really worthwhile.

**Dave Reeves was famous for his military-spec wiring. Can you explain what that is and why it's important to the Hiwatt sound?**

"Mil-spec," outside of the military and military sub-contractors, is a grossly overused term. With regard to original Hiwatts and Hi-Tones, it refers to wiring techniques that were specified by the U.S. and U.K. military subcontractors in the '50s and '60s—sort of like a dialect of electrical engineering. Ultimately, it means that if the military is buying any kind of nut or bolt for anything, they have a military specification and a code number that goes with it. The best examples I can think of are some of the new-old-stock Mullard tubes we have, the CV4004 and CV4024. That's a military-spec code for a super heavy-duty, low-noise 12AX7 and 12AT7, respectively. Dave was in the Royal Air Force from 1954 to 1956, and that's where he got a lot of his electronics training. After that, he went to work for Mullard, which is owned by Phillips [electronics company]. The mil-spec wiring with real, vintage Hiwatts and the way we do it is to make them extremely reliable and rugged, resistant to radio-frequency interference, and to bring down the noise in general to make them really, really quiet. What's really legendary about the Hiwatts is that when you have one running, you don't hear a lot of hiss and noise—or Mexican radio stations [*laughs*]. Before Dave started building these amps, he was doing a lot of work fixing amps for guys, even when he was still working for Mullard. He noticed that they weren't made very well and it didn't take much bouncing around until something came loose or there was a problem, so he wanted to make an amp that was really quiet, really reliable, could take a lot of abuse, and then—if it did need repairs—you could just open it up and look at it, because it was laid out so neatly and cleanly. It was real easy to find the problem and real easy to fix it.

**So is military-spec construction's effect on the Hiwatt sound just that it reduces noise, or is there some tonal component to it?**

It's both. Modern Hiwatt wiring is not done that way, and they definitely have more noise from it. Mil-spec wiring was done in vintage Hiwatts and in our

amps mostly to keep them clean, neat, and noise free. But some of the materials Dave used do play a part in the Hiwatt sound—namely the main wire. It's a 22-gauge, single-strand, solid-core wire that is not the easiest to work with, but it does have a little bit of an effect on the overall sound: how snappy and direct these amps are. They're extremely responsive—you hit it, and it's right there. Unfortunately, if you make a mistake it's right there for everybody to hear, too. They're very unforgiving, but they are so fast and so direct. Another big part of it is the electrolytic filtration—there is *no* sag in these, and that's part of what gives them that punch and makes them so direct and immediate sounding.

**Why do you think that 22-gauge wire isn't used by more amp builders?**
The wire isn't so expensive, but it's hard to find. It's not very easy to use, because it's a PVC [polyvinyl chloride] insulation. If you mess up, you can't really rework it very well, because you'll melt the insulation right off. Those old military guys were really skilled technicians back then, and it's taken me a while to get the hang of it.

**Was the tone stack on old Hiwatts Reeves' original design?**
Yes, but there was a lot of variation up until '71. There were who-knows-how-many one-offs. There are some that actually have old Fender- or Marshall-style tone stacks in an otherwise Hiwatt amp. There was so much variation in those first couple of years that you'll have players saying their Hiwatt sounds really dark or really bright, or it has more gain, etc. In '69 and '70 they weren't the big, high-headroom machines that they were post mid '71. Around that time, they subcontracted out to Harry Joyce Electronics, and when they came on there was one schematic, and that was it.

**The transformers you use are a big part of the sound, too, right?**
Yes. They're made for us up in Michigan by Heyboer [pronounced "hi-ber"]. They are huge—a bit overkill for some guys—but we wanted to be exactly the same as the old Partridge transformers in the original Hiwatts. The Heyboers are the same materials, same high grade of steel, and the same technique. I tried Mercury Magnetics originally, but I didn't really care for their Partridge clones.

**What did the Partridges add to the overall Hiwatt tone?**
They just add to the full-range sound. They're much more like a high-end, hi-fi transformer than anything else. That's what Dave wanted in his back then, so that's what we do in ours. We reverse-engineered the original Partridges, and it's really all about the right materials and the right winding. I had a 200-watt Hiwatt PA head from 1972 that I took the transformer out of, and we measured it and scoped it and found that it actually puts out around 255 watts.

**Photo 1:** Near-complete chassis await the next step (left), while turret boards await their hand-soldered components (right) at Hi-Tone's tidy shop in Columbus, Indiana.

**Photo 2:** A chassis outfitted with knobs and switches is ready to have its turret-board innards installed.

**Photo 3:** A completely populated Hi-Tone HT50 DR chassis.

**Photo 4:** The Hi-Tone showroom.

**Photo 5:** A finished HT30 head and 2x12.

And we figured out how they originally did it. If we skimped or tried to save a few bucks on transformers, you wouldn't have as crystal clear of a high end, and it's going to get a little grainy sounding—which is fine for certain amps, but definitely not for ours.

**Tell us about your lineup of amps.**

The DR Series is your classic, '71–'75 Hiwatt style. It's got a lot of headroom, really effective EQ, with a big punchy sound. The DG series is exactly the same, but it has an internally linked input jack, so you don't have to use a little patch cable to jumper the inputs. David Gilmour thought that was easier, so that's what's in the DG series. With that you can really fine-tune the normal and the brilliant input volumes and get some cool sounds.

The JP is based on a Hiwatt that Jimmy Page used from the spring of '69 through November of '71. It's capable of having a little more crunchy breakup, but it still has awesome cleans. By today's standards it's still a low-gain amp. It has two separate levels that you control with a footswitch, and there's a balance knob that controls the difference in volume between the two levels. So if you're playing during the verse at a lower volume, you can hit the switch and get a bit of boost. Technically speaking it's not really a boost, but you can use it like one. We've probably sold more JP models than any of them, but a lot of guys don't even use the footswitch. The balance knob can be used almost like an additional fine-tuning gain control—if you turn it all the way up, you'll get a little more volume and a little more gain. It's still a very clean, punchy amp, so it's not worlds apart from a DR or DG. It might be a little tighter sounding, and then if you crank up the input volume you can get a little more crunchy breakup than the DR or DG.

The CP is a copy of a 1969 CP103 that was one of Pete Townshend's amps. The thing about those amps is that they're very primitive—they're not all that different from a late-'60s PA head. They're really cool, but they're not all that versatile and they don't have much of an EQ. They're a great one-trick pony, but I try to discourage people from them unless they're doing a

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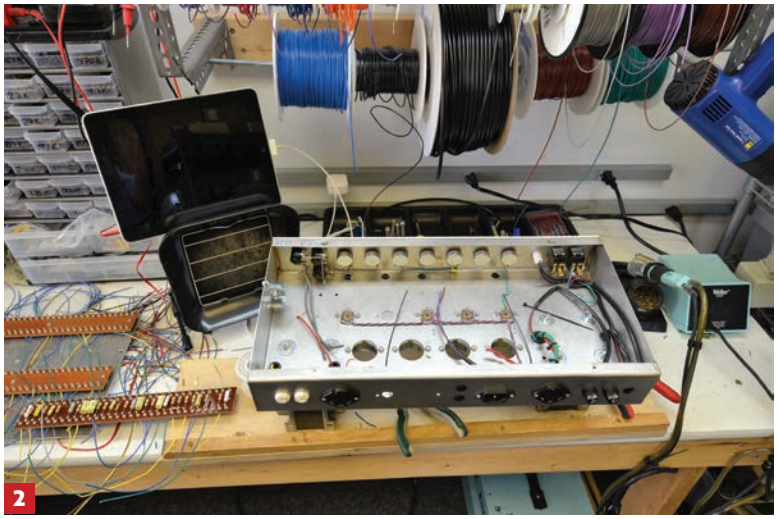
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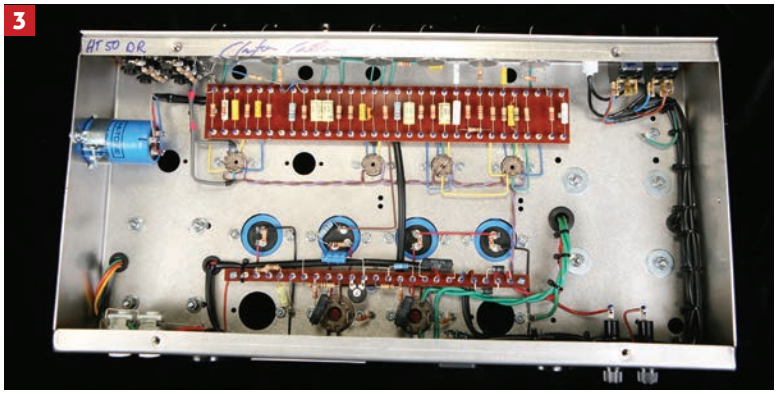

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Who tribute or something like that. You can still get those Pete Townshend tones from any of the DRs—they get very, very close.

Then we have the Lead Models, which are kind of based off an oddball early-'70s Hiwatt that was probably made for some artists at the time, though I have no idea who. The mids are a bit thicker and the tone stack is more similar to a Marshall than a typical Hiwatt, but the rest of it is definitely classic Hiwatt. Most Hiwatts and Hi-Tones only use half of the 12AX7, but this one uses both halves, so it's got more gain. When you crank it up, it gets pretty nasty. It's cool in its own way, but it's not the one you want as a pedal platform. If you're just using a couple of pedals, it likes them, but it's not the classic high headroom Hiwatt that you're used to. At the last Vintage Hiwatt Convention in 2013, one of the guys said it was the best-sounding Hiwatt he's ever heard and that we should offer it. We also have the SAP, which was originally a prototype 200-watt amp that never had a proper control panel made for it. Tonally, it's somewhere between a Marshall and a Hiwatt. It's just a killer classic-rock machine.

**You also have your own Fane-style speakers, the DR-Fs.**
Eminence makes them for us just a couple hours away from me in Kentucky. It originally came about because I was having speakers blown at the Vintage Hiwatt Conventions. Every year we'd have these speaker cab shootouts—although they were really more of a taste-test comparison. We'd use the same DR-103 or DR-504 and have the same guy try to play the same thing through each cab in the lineup. Originally it was just to sample the different Fanes that were used throughout the '70s, but then also the Weber Thames and FC-12, the Reeves Vintage Purples, etc. Every year the crowd favorite was this cab I bought from Jesse Valenzuela of the Gin Blossoms. It was a '78, and it was one of the last ones made for the rear-loaded 4x12s. It was a relatively odd speaker—they only used it for about four to six months at the tail end of the rear-loaded cabs. The model number is 125161, and it looks like a standard Fane purpleback. When I was talking to Mark about doing the speakers I said, "Do we want to try and copy the Fane 122142?" which was the most common one throughout the '70s. He said, "When you have 20 or 30 of the biggest Hiwatt junkies coming together every year and picking this cab as their favorite, obviously this is the best-sounding speaker!" So we went with it.

**What's the main thing you'd like people to know about Hi-Tone amps?**
Probably the fact that we exist! [*Laughs.*] Since you can't go back to 1972 and buy a Hiwatt, we recreate them. If you'd like to buy a 1970s Hiwatt that was made with new components and a five-year warranty, then that's all we do, really. We're probably the three biggest vintage Hiwatt fanatics in the world.