

Dialing In The Tone

with **Ross Hogarth**

Interview by Paul Vnuk Jr.



Photo by Ana Gibert

Ross Hogarth is a Los Angeles-based producer and engineer. His portfolio includes REM, Jewel, John Mellencamp, Roger Waters, The Doobie Brothers, Rita Coolidge, Taj Mahal, Ziggy Marley, Coal Chamber and countless others. His prowess at capturing great guitar tones can be heard on recordings from Mick Mars, Larry Carlton, Keb' Mo', John Fogerty, Dweezil Zappa and Phil X, to name a few. And, of course, the late Eddie Van Halen. If you have ever heard someone suggest using a Shure SM57 dynamic mic in tandem

with a Royer R-121 ribbon mic, you can lay the blame on Ross.

His most recent project is *Brother Johnny*, Edgar Winter's critically acclaimed tribute to his brother, the late Johnny Winter. This project features the six-string stylings of Joe Walsh, Billy Gibbons, David Grissom, Derek Trucks, Warren Haynes, Joe Bonamassa, Kenny Wayne Shepherd, Phil X, Tim Pierce, Steve Lukather, Robin Ford and Doyle Bramhall II. Now sit back and enjoy as Ross gives us a master class in electric guitar recording.

All amp set up photos by Ross Hogarth

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Tell us about the new album

The latest project is the *Brother Johnny* record by Edgar Winter. I produced the album with Edgar. Every single electric guitar was recorded with either a Royer R-121 or an R-122V and an SM57. A Roswell Pro Audio Colares or a Neumann U 67 served as the room mic.



How do you like the Colares?

I love that microphone. Along with Mojave, it's one of the greatest microphones that you can find today for under \$1,500. It does this great saturation thing that works really well as a room mic for guitars.

Do most guitarists arrive with their own rigs, or do they use your studio's amp collection?

It all depends. Last month I recorded Murray Pulver and Russell Broom, two of Canada's finest guitar players, who came down with just a couple of their favorite guitars. That's rare because, in L.A., everybody generally has their gear. Phil X has a very specific rig. Steve Lukather is into his Bogner and Billy Gibbons has his Magnatone. I rented cabinets for Warren Haynes when he was on the road with Gov't Mule, but he brought his own amps.

The tone starts in the fingers and it comes out of the instrument. Billy Gibbons will always sound like Billy Gibbons. David Grissom sounds like David Grissom. It doesn't matter what they pick up and play through.

When did you start using ribbon mics to capture electric guitar amps?

I got turned on to using ribbon mics back in the 80s. Many of the best engineers were using them, not for guitars at the time, but for anything that they wanted to sound 'real.' A Figure-8 patterned ribbon mic picks up sound similar to the tympanic membrane in your ear.

Ribbon mics offer incredible translation, but you could never get the older ribbon mics close to a loud source. You had to pull them back. When I worked with Mötley Crüe recording *Girls, Girls, Girls* I started sticking RCA 44 and RCA 77 ribbon mics in front of Mick Mars' guitar cabinets. I was blowing those mics on a bi-weekly basis. [laughs].

Is this where the Royer enters the story?

I can say I have never blown a Royer ribbon mic. It is important to have a tool, like a Royer, where you can get it close enough to get the proximity effect and capture the energy coming out of the cabinet, especially when you blend it perfectly in phase with an SM57.

You can put up a Neumann U 67 in front of an amp, and that's a cool sound, but it doesn't have the fist that a dynamic mic like an SM57 has. Then you bring up a Royer, which has this girth in the lower mids, and you blend that with the mid-range fist of the SM57. I have yet to find a better combo to translate the energy that happens close-up on an amp. Just be sure to play with the placement and make sure the proximity effect, the "woof," does not overtake the energy coming out of the speaker. Often pulling it back an inch helps.

Sometimes, if I am recording something more metal and heavy, I will add a Sennheiser MD 421 dynamic mic and use all three. But usually, on smaller cabinets, I stick with just the R-121 and an SM57.

Do you ever play around with other with dynamic mics?

Yes, the Telefunken M80 is useful. The Heil PR 30 is great, but they are a little brighter. For a condenser mic, the Neumann U 47 FET can take the gain, so it's a great guitar amp mic.

If you want a stereo mic that's quite 3D, the Royer SF-24 and the SF-24V are next-level room mics.

Do you usually work with a single amp, or do you like to wrestle multiple amps and stacks?

It depends on what the part calls for. If it's a part that's not going to get layered or doubled, I'm a proponent of coming out of the guitar, going into a splitter and running into two amps - something that moves the sound out of the middle. Even though the guitarist is playing a single guitar part, when you have two amps, they will never be perfectly phase-coherent. They can't move perfectly together. So you have this little bit of left and right breathing that happens. If you stack them in the mix (in mono) like on a solo, it's a great way to play with and blend the tone.

When I worked with Eddie Van Halen on *A Different Kind Of Truth*, he would rarely double his guitar parts. On the *Brother Johnny* record, Joe Bonamassa plays a single guitar part for both "Mean Town Blues" and "Self Destructive Blues," Warren Haynes' "Memory Pain" is one guitar with no overdubs, so you split the sound to a pair of complementary amps.

Do you physically spread the amps out in the room?

I will use as much space as I can. I usually place a gobo or something in between. Warren used three amps [see photo]. It was a Homestead HS100, a PRS Dallas 50W and a little Category 5 single 1x10 combo in the middle. I miked the Homestead and the PRS, each with an SM57 and an R-122V. The amp in the middle was a single R-121.

Not seen in the photo, a few feet back is the Colares, and I am splitting the guitar signal with a Little Labs PCP Instrument Distro box. You can see a similar setup from ten years ago in the photo from Eddie Van Halen's studio [see photo]. I had an R-122V and an SM57 on each cabinet, plus I was helping Royer test the



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R-101, which is now discontinued. Again you can see the gobos in between, and with Eddie, I never used a room mic.

Often when I multi-mic a guitar cabinet, I get phase issues on the room mic. I try and correct it, but often I say, "Screw it, I guess I didn't need the room mic."

More often than not, it's, "Screw it, I don't need the room mic!" [both laugh].

Do you have any phase tricks?

Always listen in mono and move the mic closer or farther. If you are in a smaller room where you don't have the option to really pull it back, don't use it.

That's one big issue I hear today with smaller studios, especially those using iso-cabinets. They load up a lot of low, mid energy. You will either need to scoop out of those frequencies or turn the amp down. You can't put something that wants air inside a small box and expect it to sound good. Similarly, not that many people have big rooms anymore. Your 4 x 12 cabinet may not be cutting it in that space, and you might need to use a smaller amp.

A big rig will not always sound big, and more is not always more. Everyone thinks you need to stack a whole bunch of guitar layers, but the biggest sounds I get are one guitar into two amps panned, or two guitars doubled left and right. That sounds big because the frequencies aren't combing [comb-filtering] over themselves.



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When you're tracking guitars, do you typically high-pass the low frequencies?

I rarely high-pass because many of the preamps reach too high for me. If you kick in the high-pass on a Neve 1073 at 50 Hz or a Neve 1084 at 45 Hz, you are already cutting away a lot of good stuff.

Do you add EQ on the way in?

You use a Royer and the SM57 like EQ. If you want a little more low-mid, bring up the Royer. If you want a little more bite and punch, pull up more SM57. Any initial EQ'ing beyond that happens on the amp. Also, I bus the two mics together to one track. I don't record them to separate tracks and blend them later; I give myself one guitar sound.

Once I bus all the guitars together, I might add an API 550A EQ or a Chandler Limited TG12345 MKIV 500 Series Curve Bender passive EQ if I want a little more of something. Also, I don't bus the room mic. That lives on its own, so I cannot use it if it is not working.

What are you using for summing your mics together?

I have a custom eight-channel Chandler Mini Rack Mixer that Wade Goeke built for me. It allows me to blend my microphones into three guitar packages and sum them prior to Pro Tools. Summing inside of Pro Tools doesn't sound the same to me.

Do you ever compress on the way in?

Certain sounds, like heavy sounds, don't need compression. The amps are compressing already. But for spanky-shit, fingerpicking, funky stuff, and slide guitar, a Universal Audio 1176LN is great to snap off some of the front end.

What about effects?

I'm not afraid of guitar players who like their pedals until I hear something that will dig a hole that you can't get out of—especially reverb. You may like all that wetness, but maybe you should not be printing it. When you mix the album, you might not be able to dry up your sound to fit in with everything else. Sometimes though, the way that a delay will go into a reverb or something is part of the sound and performance.

Just be really aware of how all that stuff might affect the mix later.

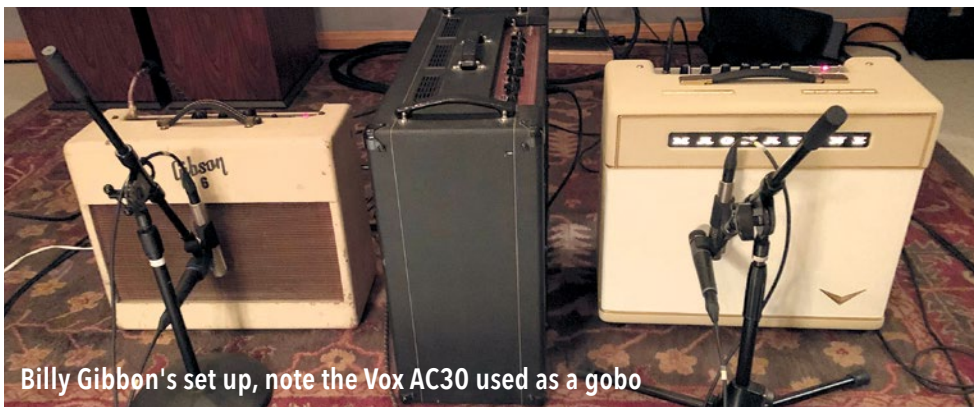
Do you ever re-amp?

Yes, and that's the thing about going into a good splitter. You've always got a direct out. That DI is absolutely a safety valve that can save your ass!

If a finicky old amp goes down in the middle of a performance, you can always come back later and recapture the part. I also highly recommend putting the DI ahead of the pedals if the guitarist is playing through effects that you're not sure of.

Do you position your SM57 and R-121 head-on in-phase?

I do, and the little AxeMount SM-21 57/R-121 Dual Microphone Mount clip is super handy. The whole deal is understanding where the diaphragms are on both mics and lining them up. The ribbon inside the Royer is basically equal to the flange that sticks out on both sides. On a SM57, the end of the dust cap is not the diaphragm. If you ripped the dust cap off [Don't do this -Ed], you would see that the diaphragm is about 1/4" back.



Billy Gibbon's set up, note the Vox AC30 used as a gobo



Warren Haynes' amp set up



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Eddie Van Halen's
amp set up

Do you have a favorite spot on the speaker to place them?

I learned a trick when recording Larry Carlton in the 80s at his studio, Room 335. Larry had me unplug the guitar from the amp so that it wouldn't blow your face off. Then you take a set of headphones and go out to the speaker with your microphone turned up hot to hear the hiss from the amp. You'll hear the hiss change as you move the mic around the speaker. When you have it right on the dome, it's a bright hissing sound. As you move to where the dome meets the cone, it gets a little duller. Then as you take it farther out to the outside of the paper, you hear it get darker and then go away.

The most natural sound is basically where that dome meets the paper. The brightest sound is on the dome; and the darkest sound is the farthest out. This helps you understand where you might want to place your microphones and helps you find the best speaker on a cabinet to use. You will even learn if you have a bad speaker.

If you're using the dual Royer clip, you'll be glued into the one mic being that close to the other mic. Sometimes that doesn't work for me because I want my Royer on the edge of the dome and the SM57 on the other edge. That's where you get the most natural sound.

But often, the clip works well because I need to work fast, and I do want the darker Royer on the bright dome with the SM57 where the cone and dome meet. This way, I don't have to EQ either mic. But if the dome is too bright, you can't just move the clip over because then you are moving the SM57 out of its happy spot.

I may have been doing it backward with the SM57 on the dome or neither mic on the dome...

Ultimately, trust your ears. Maybe it sounds great for what you are recording, but either way, try the hiss trick first to learn the sound of your speaker cones.

You have the mics pointing straight at the speaker, and yet frequently, with an R-121, I will see photos with the mic angled down toward the cone.

I've been doing the R-121/SM57 combo since 1997 or 1998, starting with the Keb' Mo' album *Slow Down*. I have never found the angle thing to be better. If you angle it, you are only using part of the ribbon. Distance front to back is more important, along with the positioning on the speaker.

If the Royer is too 'wubby,' pull it back slightly. If it's too thin, push it forward until you find that happy spot, and make the SM57 come along for the ride [laughs].

You mentioned amp volume. You work a lot with guys with half-stacks, but what about using a super small amp like Jimmy Page used on *Led Zeppelin*?

It was one of these... [Ross disappears and returns with a tiny amp]... a Supro Super with an 8" Jensen and a single volume knob. This is the secret weapon in my house. This is Led Zeppelin, baby!

I'm always amazed because even a small Fender Princeton can really cook.

The Princeton is one of the ultimate recording amps, and it's only 12 watts, but it comes down to how loud does an amp want to be? The Supro, for instance, can only get so loud. The mic can't capture it any better. It's like when a singer sings too hard. Their vocal cords compress, and they don't get any louder. They just get choked off.

So you can cross a threshold where an amp is too loud?

Yes, because the speaker cannot replicate the amount of energy put through it. There is a point of no return where it just doesn't get better.

There's something to be said about the energy and sound that happens with a 100-watt head and a 4x12 cabinet. It's just going to take a little more volume to get it to its happy zone, and the amp will sound anemic until you do. A 50-watt or 100-watt amp head was designed for stage volume. If you aren't in a space to hit that level of power, you are better off with something smaller.

Do you do a lot of post-processing on guitars in the mix?

It depends if I recorded them or not. A simple high-pass between 10 to 30 Hz can clean up the guitar a little and is pretty standard. It can get too thin if you take it too high on guitars.

Then there are certain EQs like a Helios that are just so guitar-friendly. Just about every frequency on a Helios makes a guitar sound better. Or the new Heritage Motorcity Equalizer, some EQs just make the guitar sound better.

Same with compressors like a Fairchild or an LA-3A. Even just their inherent natural tone helps. I look for gear and plugins that just make the guitars sound better, more than surgically trying to fix something.

Sometimes a 4x12" cabinet has a great bottom end, but it needs more bite to cut through the mix. Or sometimes it's trying to fight through the cymbals. Cymbals eat guitars, so you might need more upper-mids in the guitar to fight through them.

Are you an in-the-box guy or analog?

I'm a hybrid mixer. In fact, Universal Audio, Waves, and McDSP all feature presets I have made. Recently, I worked with IK Multimedia on the Sunset Sound plugin. But then, if you look over my shoulder, you'll see piles of gear from Retro Instruments, Manley, Chandler, Pulse Techniques, Heritage Audio...

Ross, this has been a master class in amp recording. Thanks!

Thank you! ➡



Joe Bonamassa's amp set up with JJ Cale 4x10 Fender Bassman

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