

# **Dialing In Your Tone with Redwirez IRs**

Part of the reason we gave you so many options is because we wanted you to feel like you're sitting in the control room with an assistant in the live room moving the mic around the cabinet. If you've ever mic'ed up a real speaker cabinet, you will likely be perfectly comfortable with the number of choices we offer. But, if you usually leave that stuff up to the sound guy, then you may be feeling a bit overwhelmed. This guide was written to help you quickly dial in the tone you want. Finding your sound can be boiled down to a few simple rules.

The first rule of rolling with Redwirez:

### 1. Do not feel like you need to try every IR.

The second rule of rolling with Redwirez:

# 2. Do NOT try every IR!

Seriously. There's absolutely no reason to do this, unless you are a big fan of ear fatigue. The point of having a ton of IRs is to give you the flexibility to zero in on your target tone. Not to send you down the rabbit-hole, never to return.

Which leads us to the third rule:

#### 3. Start with a neutral position and tweak from there.

The base speaker positions are Cap, Cap Edge, Cone and Cone Edge. On most cabs, the Cap Edge series of positions is the most neutral. By neutral, we don't mean flat (from a frequency perspective). We just mean that, for a given mic, the Cap Edge position will usually have the best balance between low frequencies and high frequencies. **So, as a general rule, Cap Edge 1" makes a good starting point on most cabs and mics.** Pull it back a bit more for ribbons and condenser mics because the more pronounced proximity effect will add low-end (see below).

Go ahead and try a few mics in the CapEdge 1" position. This position should give you a pretty good idea of how the mic/cab combo is going to sound. If you never use anything besides the SM57, R121, 421 and U87 don't feel bad, you're in good company.

However, each mic is designed to have its own unique frequency response, so a little experimentation may be called for. Here are some good starting points for different mics. The mics are loosely ordered based on their popularity with our users:

Mic	Starting Point	Alt Starting Point	Notes
SM57	CapEdge 0.5"	CapEdgeOffAxis 1"	Dynamic. Work it up close for proximity effect and off-axis to tame the aggressive upper mids
R121	Cap 2"	Cap 4"	Ribbon. "Natural" unhyped upper mids and BIG proximity effect gives it the feel of listening to a guitar cab, in the room, off-axis
421	CapEdge 0.5"	CapOffAxis 0" Cone 3"	Dynamic. Edgier upper mids for cutting through the mix
U87	CapEdge 2"	CapEdge 3"	Condenser. Studio staple.
409	CapEdge 1"	CapEdge 0.5"	Dynamic. Kind of a mix of the SM57 and R121 with a grainer texture. Cool mic.
M160	Cap 2"	Cap 1"	Ribbon. One of our favs. Not as much proximity effect as the R121, but still has the laid back highs of a ribbon.
TAB57	CapEdge 0.5"	CapEdgeOffAxis 1"	Dynamic. Modded 57 with more highs and lows
U67	CapEdge 2"	CapEdge 3"	Condenser. Extended lows, sweet mid-range and smooth high-end.
U47	CapEdge 2"	CapEdge 3"	Condenser. A classic. Ample lows, sweet mid- range and smooth high-end.
C414	CapEdge 2"	CapEdge 4"	Condenser. Slight dip in the upper-mids and big proximity effect gives it a dark, "fat" feel.
KM84	CapEdge 2"		Condenser. Flat response with a proximity bump.
тС30	CapEdge 0"		Condenser. Flat reference mic. No proximity effect.
441	CapEdge 1"		Dynamic. Similar to 421 but with fuller mids and less edgy upper-mids.
RE20	CapEdge 0"		Dynamic. Well-balanced mic with ample low- end. Muted proximity effect.
SM7	CapEdge 0"		Dynamic. SM57ish with a less pronounced proximity effect, mellower upper-mids and more low-end.
i5	Cone 0"		Dynamic. Scooped mid range and a big presence bump. Bright mic.
PR30	Cone 1"	CapEdge 0"	Dynamic. Works well on metal guitar. Can sound brittle on signals lacking low-end.
4038	CapEdge 12"		Ribbon. Old school ribbon with a whopper of a proximity effect. Only useful up close if you boost the highs or mix with another mic.

Because our IRs were captured in a rigorous manner, the differences between positions (IRs) is linear and predictable. Because of this you do not need to try every IR. You can start with a neutral position and then dial it in from there because you have a good idea what moving the mic will do to the sound.



### 4. Dial in your tone using a few simple techniques.

- 1. Move the mic closer for MORE proximity effect and thus MORE low-end.
- 2. Move the mic farther away for LESS proximity effect and thus LESS low-end.
- 3. Move the mic towards the cap for definition (if it sounds too muddy).
- 4. Move the mic out towards the edge of the cone if it sounds too harsh.
- 5. If it sounds too bright, sometimes it'll work to leave the mic where it is and just flip it off axis. It will roll-off the highs and depending on the mic give it "grainy-er" sound.

#### A word on mixing:

You don't need to mix mics to get a great tone, but it is common practice in the studio. Try blending mics with complimentary characteristics. The IRs are time-aligned so you can mix a 2" mic signal with a 0" mic signal and not have to worry about phase coherence due to the different distances.

Try mixing an SM57 for some bite and an R121 for the beef. Or, try a 421 with an R121 for the same effect with more cut and less upper midrange bite. Try blending in the room mics, the back of cab mics, and the mics placed farther back for a more 3D sound.

One trick is to use an off-axis position and then apply a high shelf EQ to boost the highs and add some "air". This can give the signal a more "vibrant" feel. Similarly, you can use a Cone or Cone Edge position and apply a high-shelf EQ to add highs with a different character than the speaker Cap position.