

The Differences In Our Wiring Kits

ToneShaper wiring kits for Gibson guitars are available in modern and vintage versions. The only difference is that the modern kits include treble-bleed networks (resistor/capacitor in parallel) and the vintage kits don't (saves you a couple of bucks if you don't need them). And of course, there's a different wiring diagram, as there is a minor difference in the tone control wiring.

The Issue. Or Not.

When we talk about modern vs. vintage wiring, we're really talking about the way the tone controls are wired into the circuit. There are several ways to do this, but most often we've seen Gibson use what is generally referred to as modern wiring.

In fact, *vintage* wiring may be something of a misnomer. Several years ago we happened upon a post on the Les Paul Forum that had four photos of 1958-1960 Les Paul control cavities - unaltered - that all featured modern wiring. So we're not sure where the terms "modern" and "vintage" originated. Still, they're widely used, so we'll use them too.

In any case, there's a tonal consequence to modern wiring: Guitars wired in this way experience some treble loss when the volume control is rolled down. Discussions about the reasons and remedies for this quickly devolve into arcane electronic theory and advanced mathematics, which we're not interested in, and we assume you're not either. Suffice it to say that it's a real and noticeable phenomenon. But is it a bad thing?

Maybe. The truth is that the treble roll-off that comes along when you wrangle those volume controls is annoying to some people, but isn't at all to other people. And of course, many people have never even noticed it.

Everyone's situation is different. The player who dimes his Deluxe to get some sustain - then uses the guitar's volume control to clean up the amp for rhythm work - may want less gain when he rolls down the volume, but without any treble roll-off or tonal change.

Another player might like the treble roll-off, as his main use of the volume control might be to disappear into the mix onstage at opportune moments, like when someone is singing, or when someone else is soloing.

So there is no wrong or right here, your opinion is the only one that matters.

If you feel that the treble loss is a problem, there are a couple of ways to address it. One is to use modern wiring, but add the treble-bleed networks to your volume controls. The other way is to use vintage wiring.

Modern Wiring

Pro - The tone controls receive their signal from the inputs of the volume controls, so they're effectively connected directly to the pickups. Consequently, the volume pots' settings have no effect on the operation of the tone controls, which operate completely independently of the volume controls.

Con - The tone changes as you roll down the volume pot - there is some treble roll-off in addition to the volume roll-off. Again, this can be pretty effectively dealt with by installing the treble-bleed networks that are included in the modern kits. These do a good job of dealing with the treble roll-off, but there may be some modest tonal compromise associated with them - depending on who you ask, of course - so they may not be a perfect fix.

Having said that, the majority of people who try them find them to be an improvement, with little or no perceptible tonal trade off.

In fact, let's elaborate. There are people out there who call these treble-bleed networks the worst thing in the world for your tone, that they will absolutely destroy the tone of good pickups. We think that's a massive overstatement. There are many ways to employ them in a circuit (resistor/capacitor in parallel; resistor/capacitor in series; capacitor only), and of course the values of the components can vary widely. Perhaps some people have had a bad experience with them because of the values that were used, or perhaps there was some other issue. But we have a fairly vast amount of experience with these, and our experience suggests that they are a perfectly good solution for many players.

Vintage Wiring

Pro - When you roll the volume control down, you don't have a corresponding treble roll-off, the tone stays consistent.

Con - The tone and volume controls are interactive, because the tone controls receive their signal from the output of the volume pots (rather than the input). So a volume control that is turned down half way is feeding less signal to its tone control than it would if it were turned all the way up.

See there?

You just don't get something for nothing. Where electronics are concerned, this is *always, always, always* true.

The bottom line is this: There are compromises with either wiring style. You'll have to choose which compromises you're more willing to live with. Remember, it's all opinion out there on the Internet. The only way to *really know* is to try various options and see for yourself.

And remember this as well: your opinion is valid! There's no right or wrong with this stuff, so do what works best for you. There are many people for whom the line between opinion and fact seems to be blurred, and they will happily tell you you're wrong if you don't see it their way. Forget these people, no matter their credentials. Your opinion is the one that matters.



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