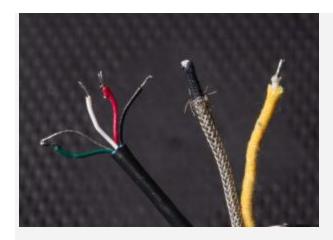


How to Add Push-Pull Pot Wiring to a Les Paul Style Guitar

Push-pull pot wiring is the perfect way to add more tonal options to your Les Paul or LP-style guitar. Coil-tapping, split-coil, in and out of phase, or parallel-series options become available with the flick of your wrist. The mods are easy to do. It's extremely affordable. And it doesn't require any permanent changes to your guitar.

These mods are so easy to do; we're going to walk through the 4-step process right now.

Tech Tips: In most cases, push-pull wiring only works with 4-conductor (4c) humbucking pickups. Most modern humbuckers already offer this option. But vintage pickups and today's vintage designs usually feature 1c construction. So before going any further, ensure you have the right pickups for the modification.



If you have 1c pickups that you love but want to add push-pull wiring, there's sure to be a <u>Seymour Duncan 4c replacement humbucker</u> with the perfect tone profile.

The 4 Steps

- Ensure you have the correct push-pull potentiometers (pots)
- Document everything
- Uninstall the old pots
- Install the new pots



Ensure you have the correct push-pull pots

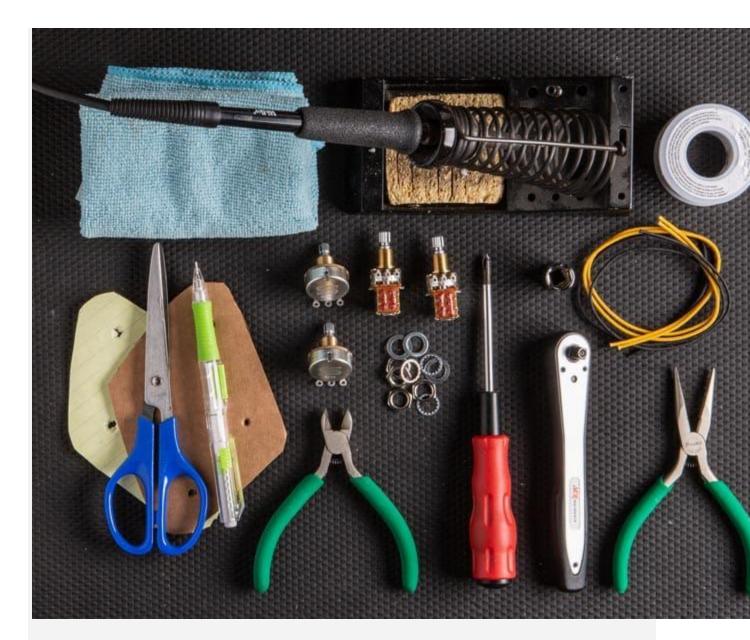
Push-pull pots come in different configurations. The two main specifications to consider are the pots' size/design and the pots' rating.

Size/design

Because all electric guitars have different electronics-cavity depths, there are different push-pull pot styles for each. Les Pauls work best with a taller design and longer shaft. This helps ensure the shaft makes it all the way through your guitar's maple cap. Make sure you get the right ones.

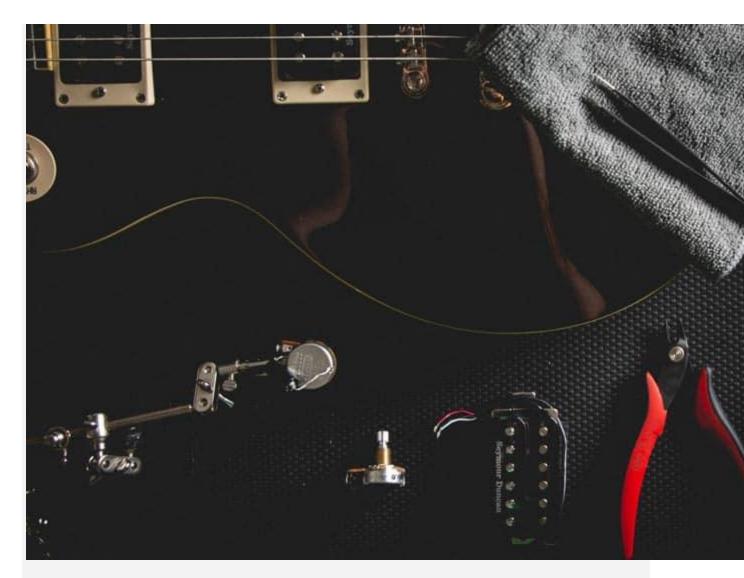
Rating

250k and 500k are the two most commonly used pot ratings. As a general rule, you want 500k pots for humbucking pickups. But, don't be afraid to experiment!



Document everything

When adding push-pull pot wiring, first take pictures of the original wiring inside your guitar. Any smartphone or camera will work fine. You also want to document the different steps throughout the entire modification process. Documenting will help you install your new pots correctly and get back to stock wiring if you ever choose.



Uninstall the old pots

Time to remove the old parts and components. Grab your soldering iron and unsolder all the connections connected to the pots you will be replacing. Make sure to leave the connections that will remain. These include the other pots, your grounding wires, your jack, and your toggle switch.

You remembered to document it first, right?

Carefully remove the knobs on top of the old pots being careful not to damage your guitar's finish. Unscrew the nuts that secure the pots to your guitar, then set them and the washers to the side. Finally, remove the old pots from the guitar and set them aside.



Install the new pots

Installation of the new push-pull pots is essentially the last step but in reverse. Place the new pots into the correct routes in your Les Paul's top. Then secure them in the correct position—identical to the old pot configuration—with the corresponding washers and nuts.

You can now install the knobs on the potentiometer shafts. But that can also wait until the end of the installation.

Tech Tips: Some potentiometers have a metal tab that will rest against your pickguard or the underside of your guitar's top. These tabs can obstruct it from fitting securely in place. It's perfectly okay to file that tab off of the potentiometer. Just be careful not to damage the pot's electrical components.

Seymour Duncan push-pull wiring diagrams

Head to the <u>Seymour Duncan wiring diagram library</u> and locate the diagram of your choice. These diagrams are free and extremely easy to use. So don't be afraid to try a few different options.

Following your chosen diagram, resolder the connections to the push-pull pots as directed. Your guitar should have plenty of original wire available to complete the installation.

Reinstall your guitar's back plate or pickguard, restring your guitar, and you're ready to go!

Congratulations! You now have a Les Paul with push-pull pot wiring.

All that's left is to plug your guitar in, crank your amp, and make sure everything works. Depending on the wiring modification, you'll have any number of brand-new tones. And they're available from the controls you're already comfortable with.

If your new tones aren't what you wanted, find a different wiring diagram, change a few connections, and try something else. All of these modifications are easy to do and fully reversible.

Let's talk tone!

Want to know more about push-pull pot wiring and other guitar upgrades? Check out the <u>SEYMOUR DUNCAN ONLINE PICKUP CLASSES</u>. Our expert technicians will walk you through every step of the process and teach you all you need to know to create the guitar of your dreams.

If you have any other questions about push-pull pots, check out our <u>Knowledge Base here</u>. You can also <u>email us here</u>. And don't forget to dig deeper into the <u>Seymour Duncan blog!</u> There's a ton of in-depth information on all of our different designs, how-tos, tone demonstrations, and a lot more.