

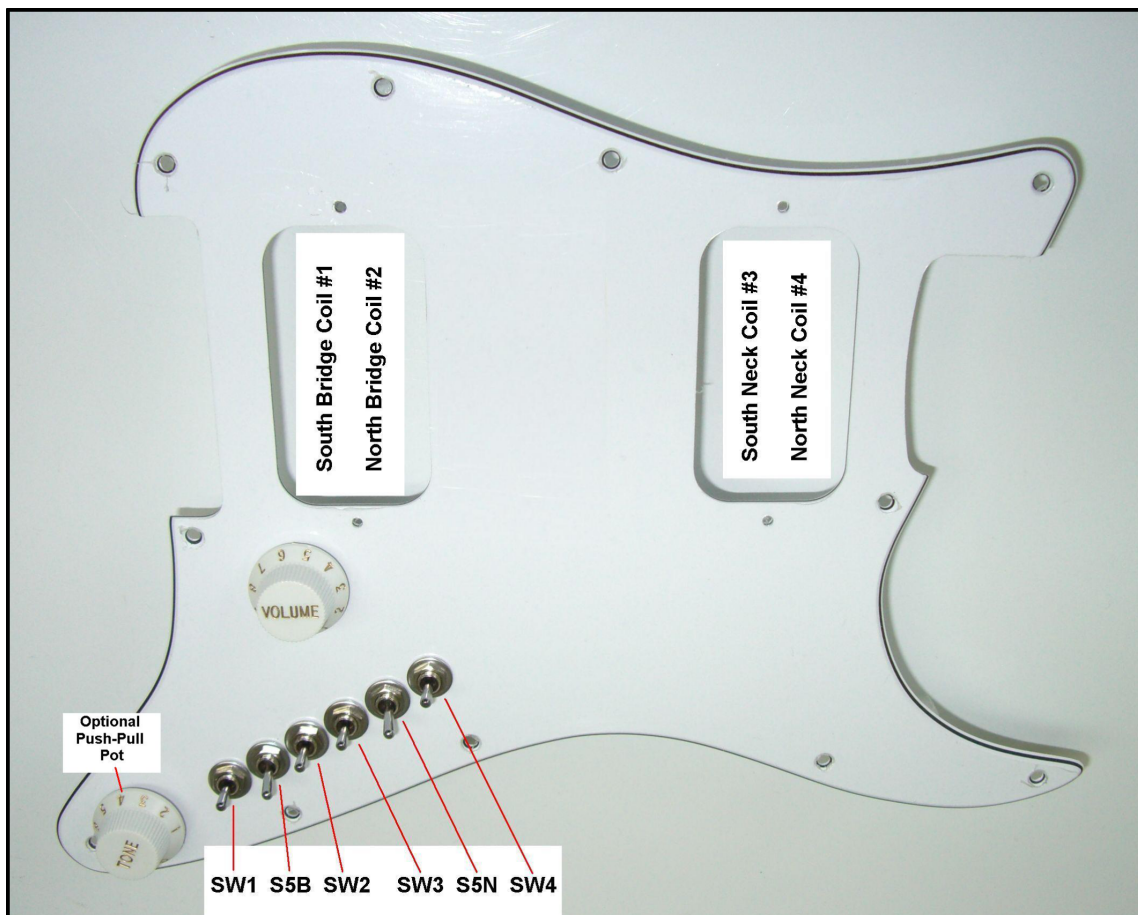
Your Stratocaster Upgrade is designed to control four separate pickup coils. It uses either our **T4 Switch** (paired with our *VT-2 Volume-Tone Control*) or **T4Plus Switch** (paired with our *VT-3 Volume-Tone Control*).

The below illustration shows an **HH** pickup configuration with two 4-wire humbucker pickups.

The T4 Switch and T4Plus Switch upgrade can *also* be used with an **HSS** pickup configuration.

For the **HSS** pickup configuration (*not shown but uses the below illustration*),

- the South Neck Coil #3 is the Middle single-coil pickup and
- the North Neck Coil #4 is the Neck single-coil pickup.



There are really two "groups" of switches:

(SW1, S5B, SW2) -and- (SW3, S5N, SW4)
for HH: (control bridge coils) (control neck coils)
for HSS: (control bridge coils) (control middle & neck coils)

Here is how the switches are used:

Switches SW1, SW2, SW3 and SW4 are ON-OFF-ON switches used to turn an individual pickup coil Off and On. The middle position of each switch is Off. The down position turns the pickup On (in *normal-phase*) and the Up position turns the pickup On (in *reverse-phase*).

Switches S5B and S5N are ON-ON (a.k.a. ON-NONE-ON) switches that are used to put select pickup coils into a **Series circuit** when in the Up position. When Down, the select pickup coils are in a **Parallel circuit**. Pretty simple, don't you agree?

When switches *S5B and S5N* are in the *Down position*, you will get 29 different pickup tones from the various combinations of four pickup coils being Off or On (either in *normal-phase* or in *reverse-phase*) using switches SW1, SW2, SW3 and SW4. These pickup tones are also due to the combination of pickup coils being in a **Parallel circuit**.

The other switches (S5B and S5N) are ON-ON (a.k.a. ON-NONE-ON) switches are used to put select pickup coils into a **Series circuit**. Here are two things you must remember when putting pickup coils into a Series circuit:

First, putting two pickup coils in Series circuit creates a "*Compound*" (i.e., Humbucker) pickup that gives you about 8 to 15 percent More output (think Heavy Metal/Jazz tone).

Second, because the pickup coils are in a Series circuit, **BOTH** of the affected pickup coils that are in a Series circuit **MUST** be On (either in *normal-phase* or *reverse-phase*). Any non-Series circuit pickup can be either Off or On (either in *normal-phase* or *reverse-phase*).

What Each Switch Controls

Switch SW1: Turns on (south bridge) pickup coil #1 (down is *normal-phase*, up is *reverse-phase*, center is Off.)
Switch S5B: Puts both (bridge) pickup coils #1 and #2 into a Series circuit when Up. Both pickup coils **MUST** be On.
Switch SW2: Turns on (north bridge) pickup coil #2 (down is *normal-phase*, up is *reverse-phase*, center is Off.)

Switch SW3: Turns on (south neck) pickup coil (down is *normal-phase*, up is *reverse-phase*, center is Off.)
Switch S5N: Puts both (neck) pickups into a Series circuit when Up. Both pickup coils **MUST** be On.
Switch SW4: Turns on (north neck) pickup coil (down is *normal-phase*, up is *reverse-phase*, center is Off.)

The result of the T4 Switch will give you 68 pickup tones from four separate pickup coils.

The T4Plus Switch uses our VT-3 Volume-Tone Control to give you even more pickup tones. When the Tone control push-pull pot is pulled up, it puts the north bridge and south neck (*or middle*) pickup coils into a series circuit. This gives you 34 additional pickup tones, several of which are **QuadraBucker™** pickup tones (*all four pickup coils in series*).

The various combinations of all of these switches and the push-pull tone control will give you 102 pickup tones.

Special Note: For easy identification, switches now have colored covers: White for pickup coil switches, Black for parallel-series switches. (*remove them if not needed.*)

See our website Document library for pickup tone mapping worksheets.