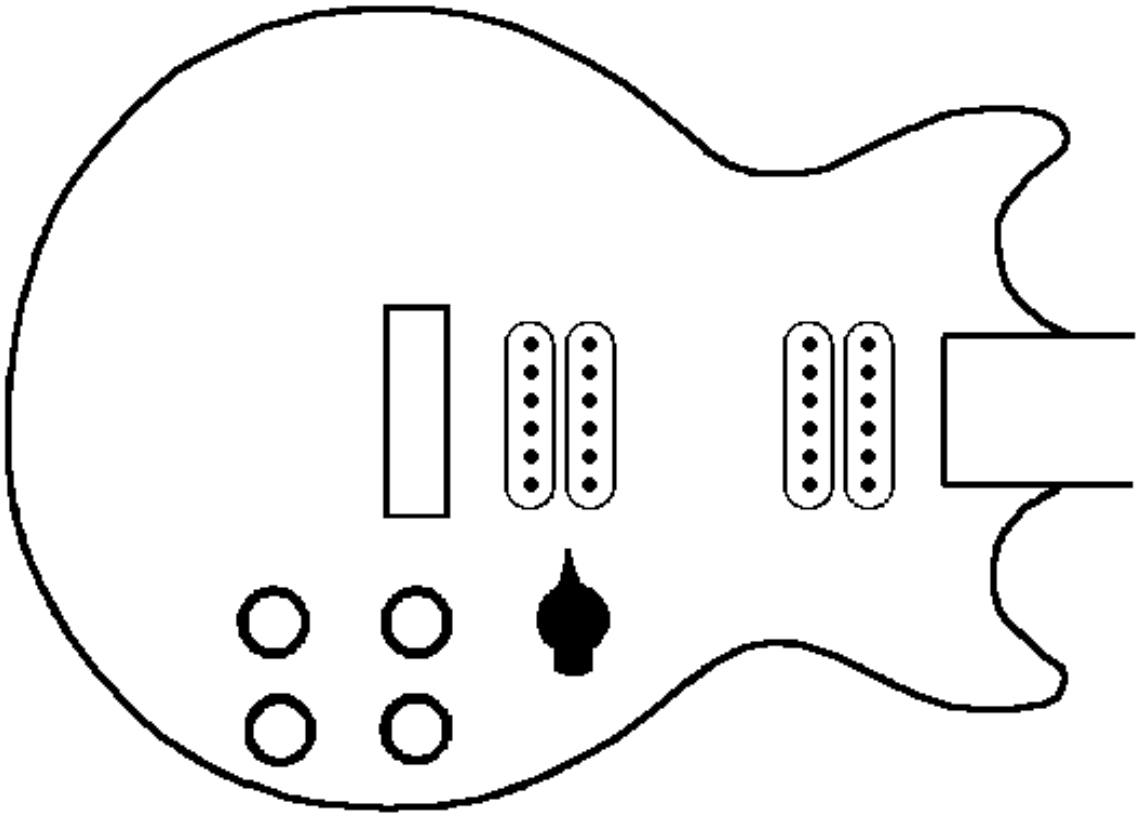
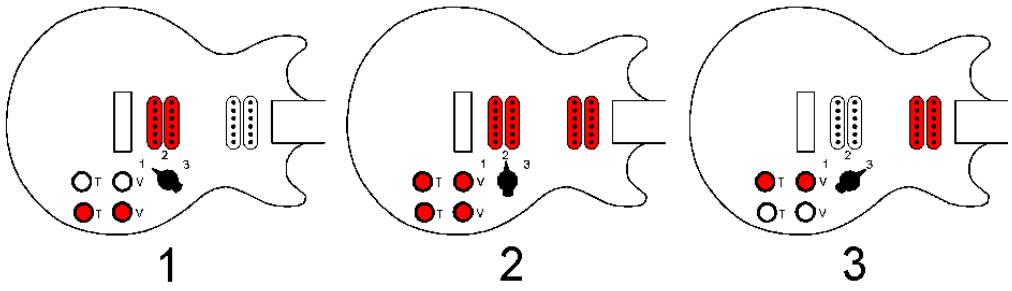
HH4P

HH4P: two humbucker, four potentiometers

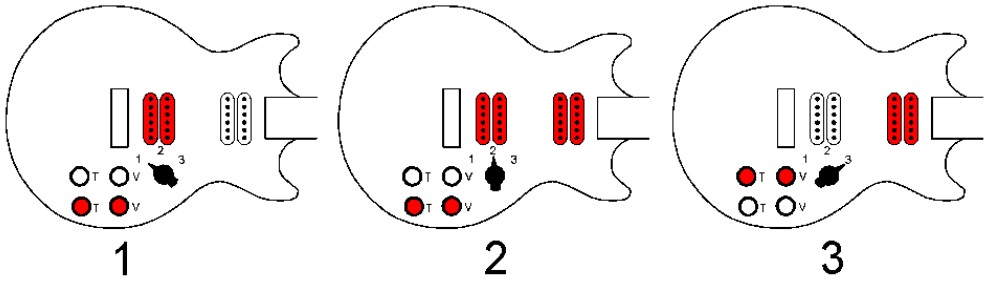
Overview



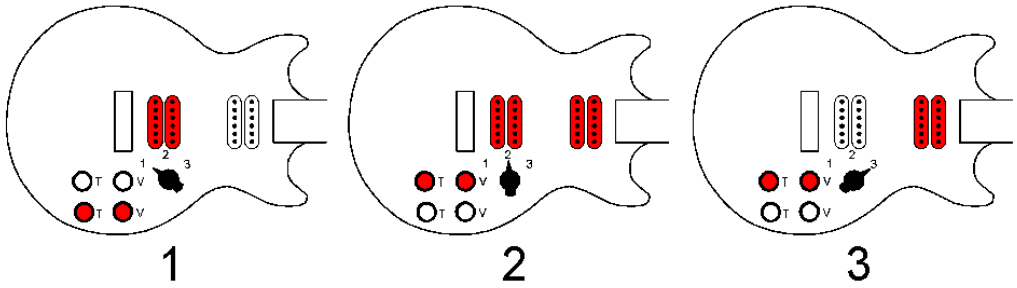
HH4P-1. Classic circuit with three positions, Megaswitch T



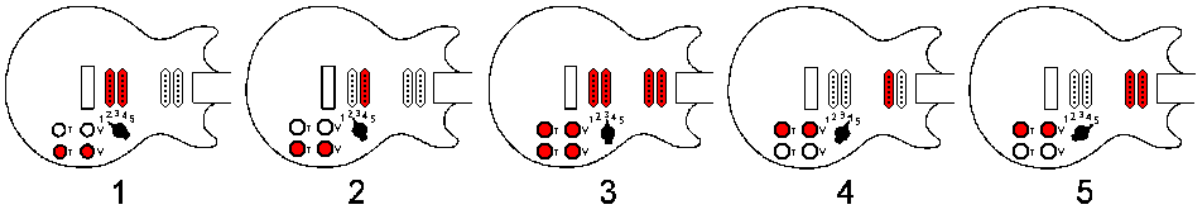
HH4P-2. With decoupled volume controllers A, Megaswitch T



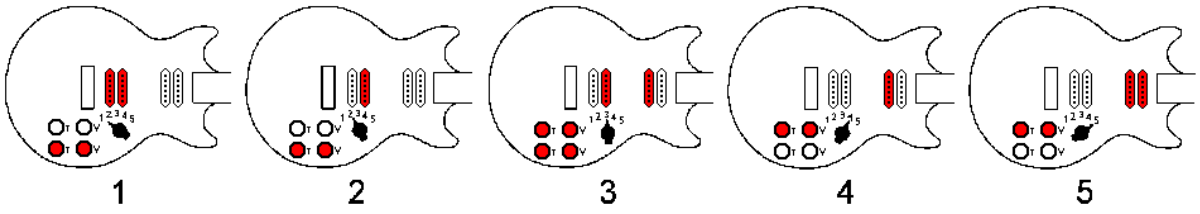
HH4P-3. With decoupled volume controls B, Megaswitch T



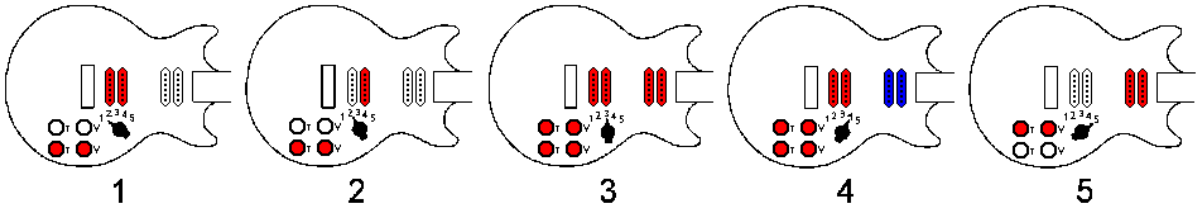
HH4P-4. Five switch positions, two of them with humbucker splitting, Megaswitch M.



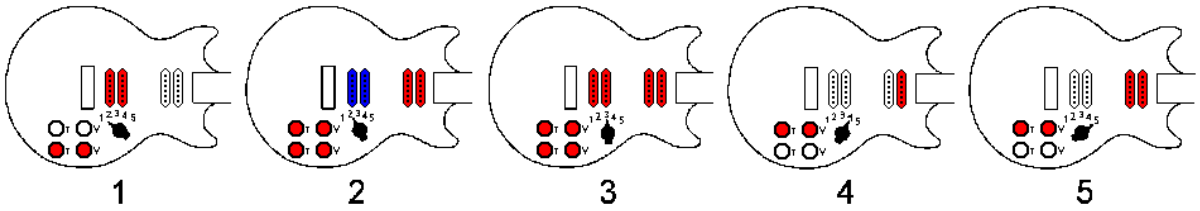
HH4P-5. Five switch positions, three of them with humbucker splitting, Megaswitch M.



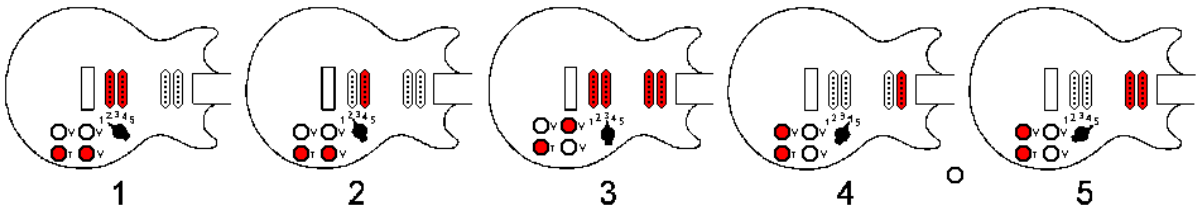
HH4P-6. Five switch positions with antiphase and humbucker splitting, Megaswitch M



HH4P-7. Five switch positions with antiphase and humbucker splitting, Megaswitch M



HH4P-8. Five switch positions, three volume controls

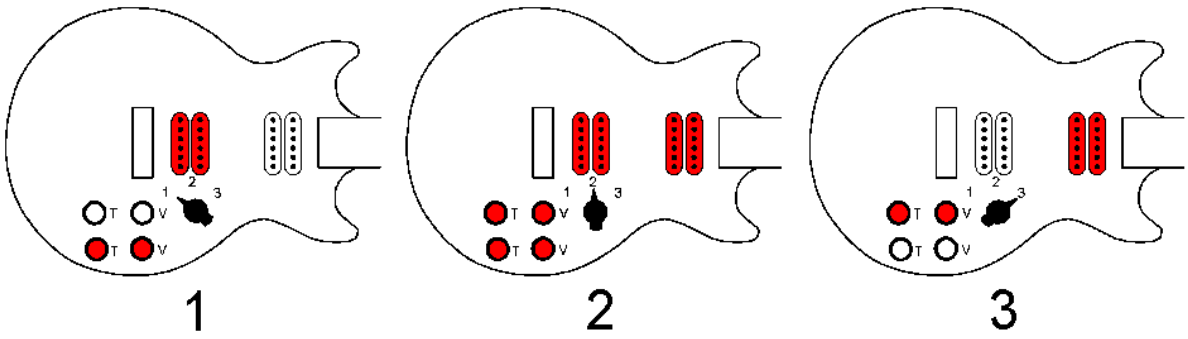


Detail drawing

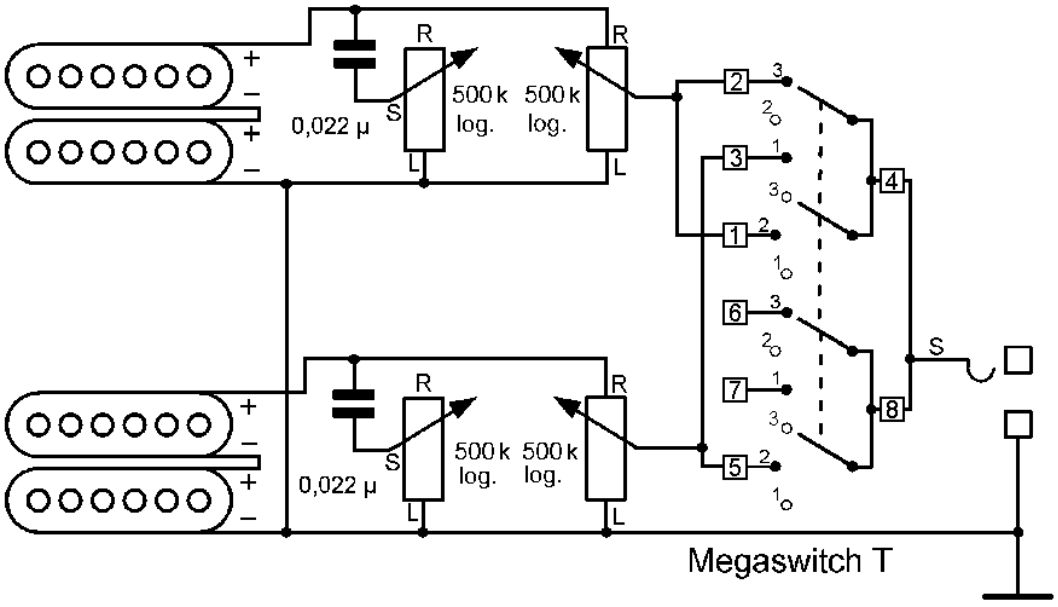
HH4P-1. Classic circuit with three positions, Megaswitch T

This is the standard circuit widely used in guitars with two humbucker. A Megaswitch T Rotary switch has simply replaced the usual toggle switch. The three switch positions are: bridge, both parallel, neck. Each pickup has its own volume and tone controls. In the middle position (2), the two volume regulators are linked as usual. Mixing both pickups continuously is difficult, and if you turn one knob to zero, the whole guitar is mute.

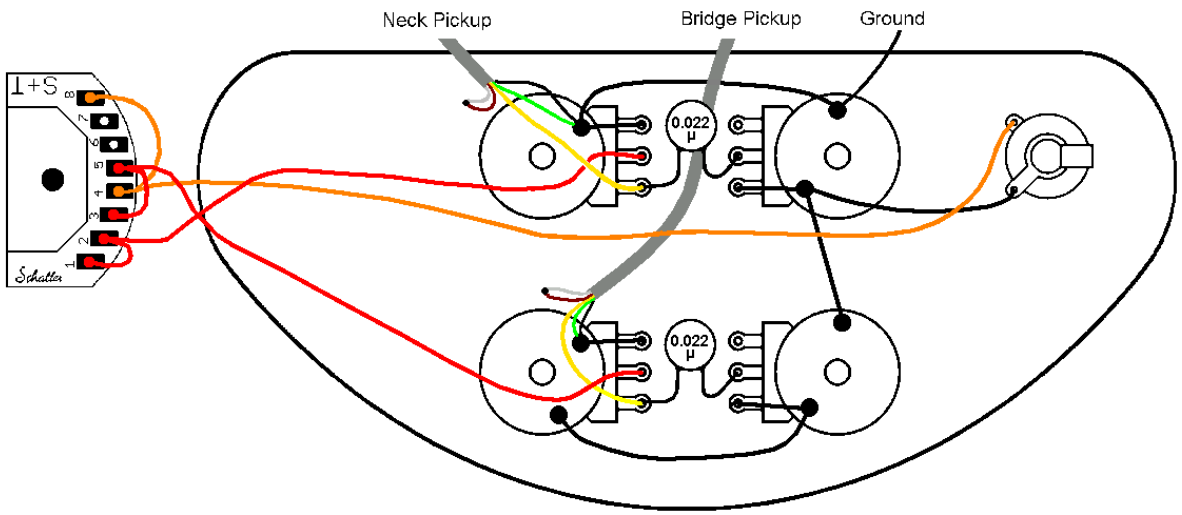
Switching functions:



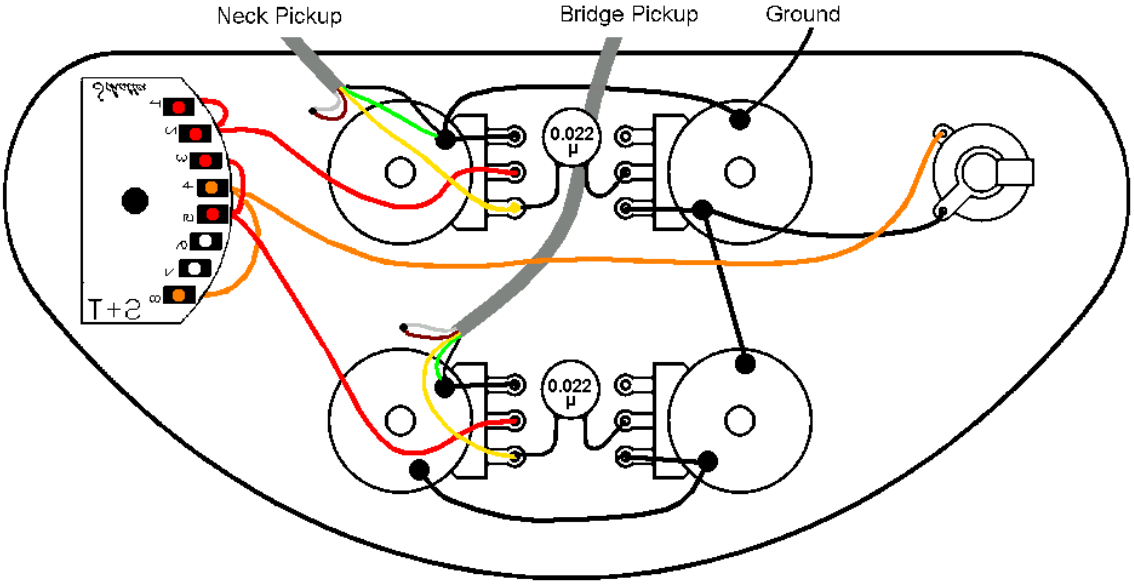
Electrical switching principle:



Wiring diagram:



Wiring after installing the switch:



Connections:

position

1 bridge humbucker, lower controls

2 both in parallel, both volume controllers linked as usual

3 neck humbucker, upper controls

connection

1, 2 on grinder volume neck

3, 5 on grinder volume bridge

4, 8 output

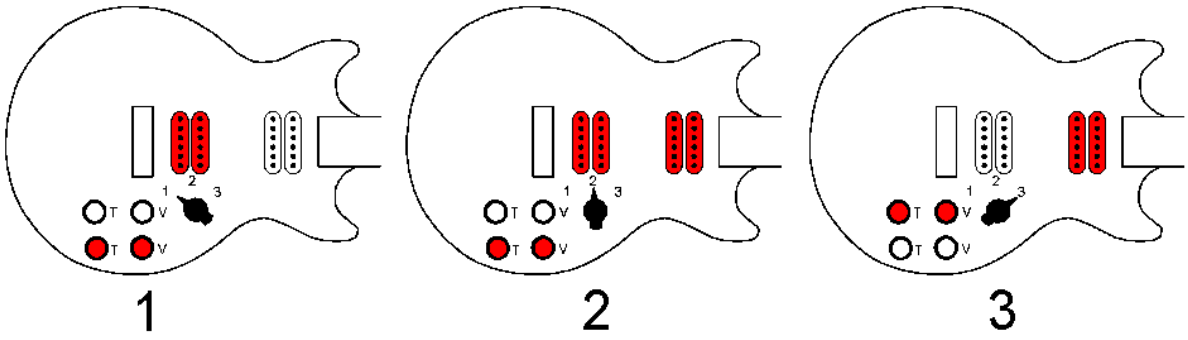
6 -

7 -

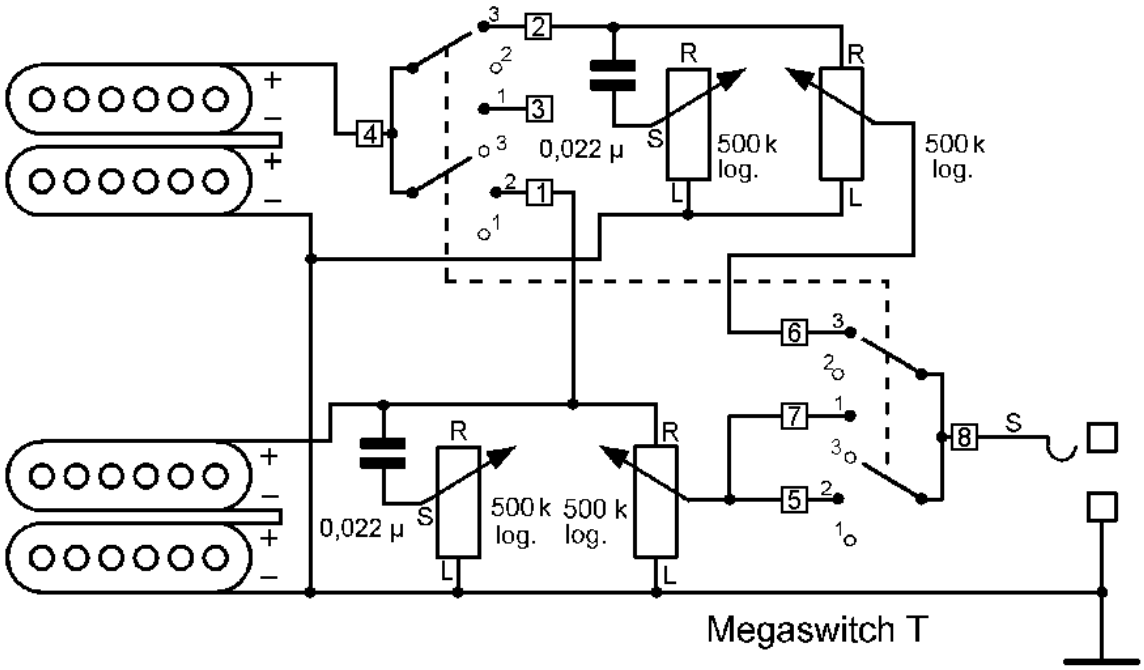
HH4P-2. With decoupled volume controllers A, Megaswitch T

This circuit has a significant improvement over the standard circuit HH4P1: The two volume regulators are decoupled. The switch positions 1 and 3 are unchanged. In switch position 2 both pickups are switched on, but only the two lower controls are effective. The switch is a Megaswitch T Rotary.

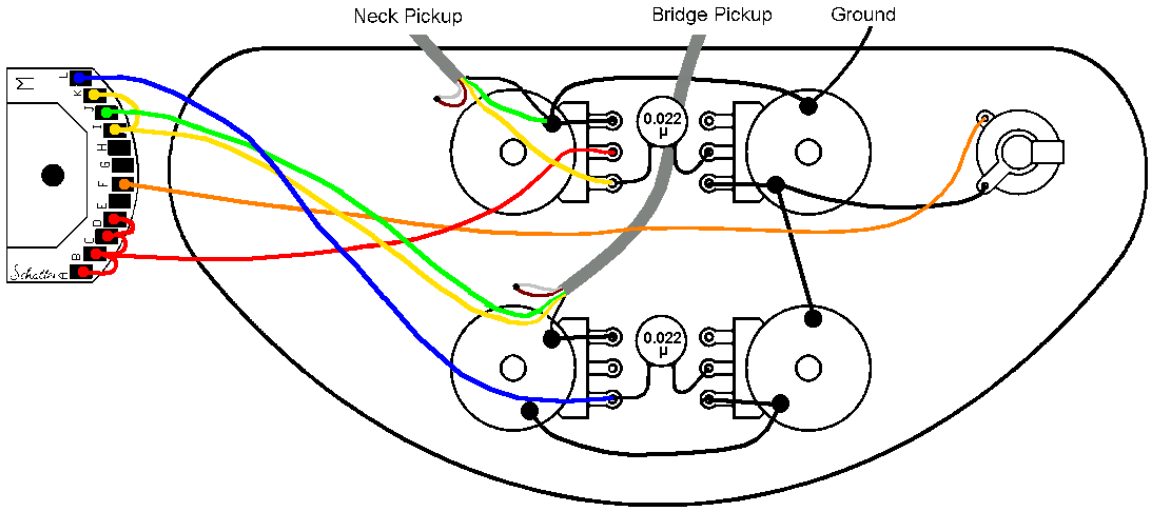
Switching functions:



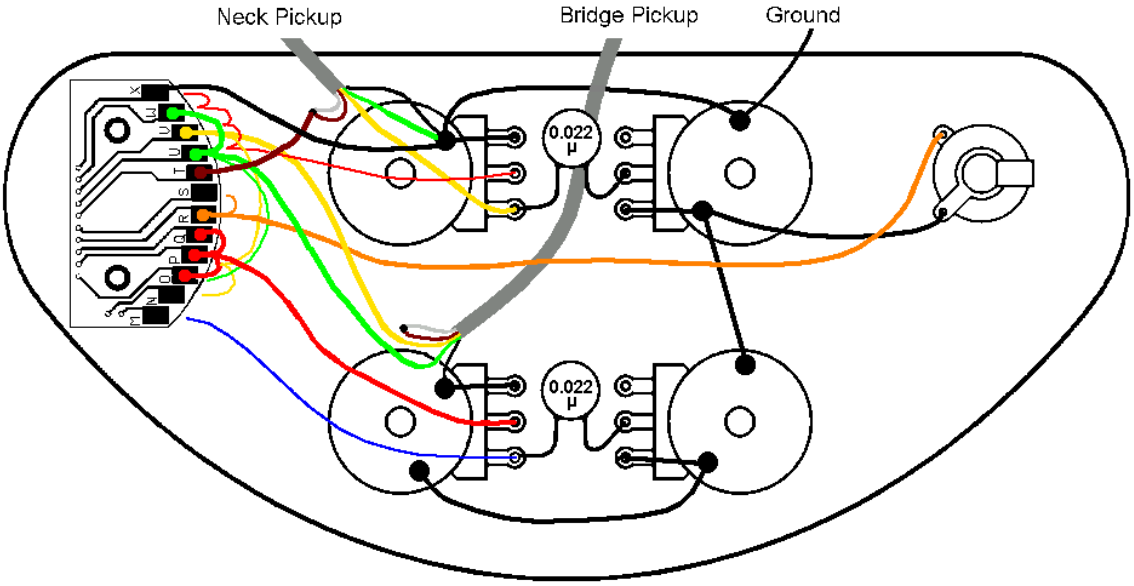
Electrical switching principle:



Wiring diagram:



Wiring after installing the switch:



Connections:

position

1 bridge humbucker, lower controls

2 both humbucker in parallel, lower controls

3 neck humbucker, upper controls

connection

1 hot connection bridge humbucker and right connection volume bridge

2 right connection volume neck

3 -

4 hot connector neck humbuckers

5, 7 grinder volume bridge

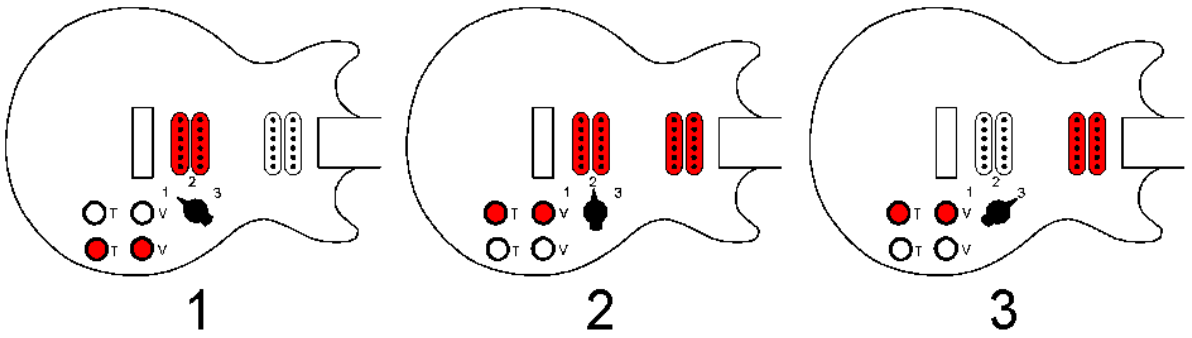
6 grinder volume neck

8 output

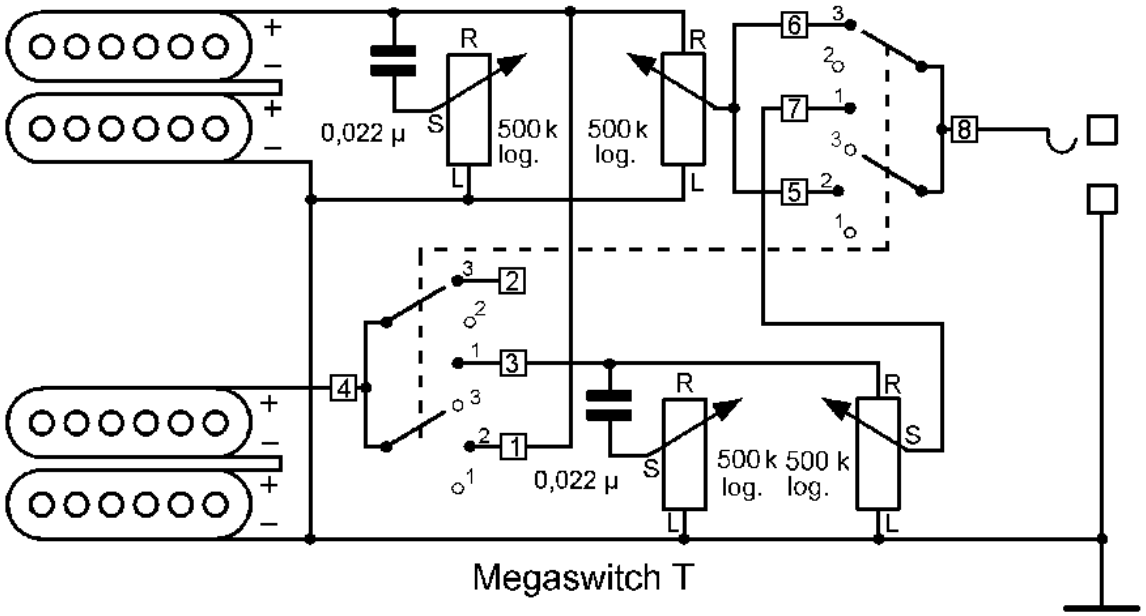
HH4P-3. With decoupled volume controls B, Megaswitch T

This circuit is a modification of the HH4P-3. The switch positions 1 and 3 are as usual. In switch position 2, both pickups are switched on, but the two upper controls are effective here. The two volume regulators are decoupled. The switch is a Megaswitch T Rotary.

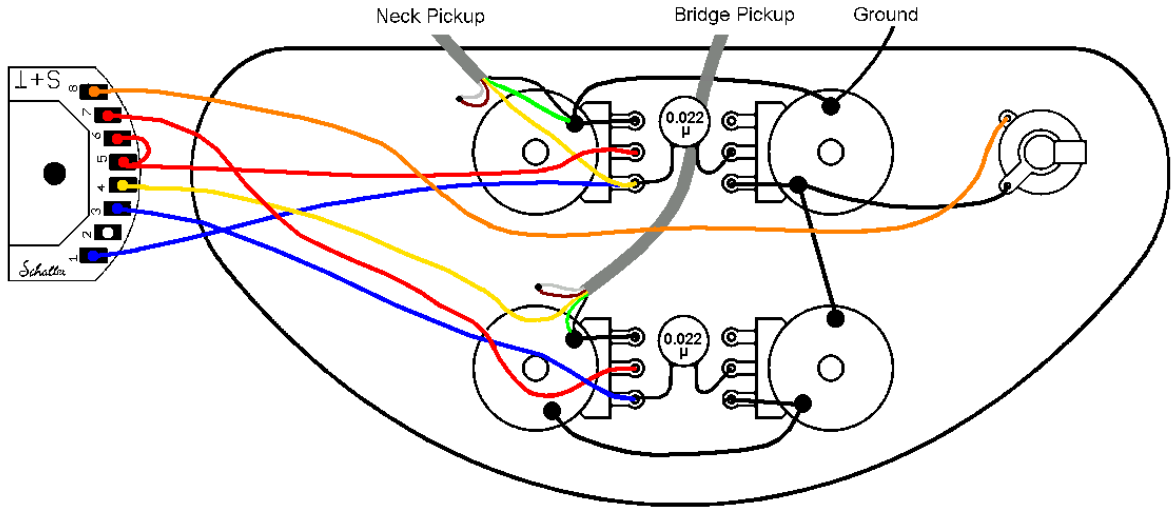
Switching functions:



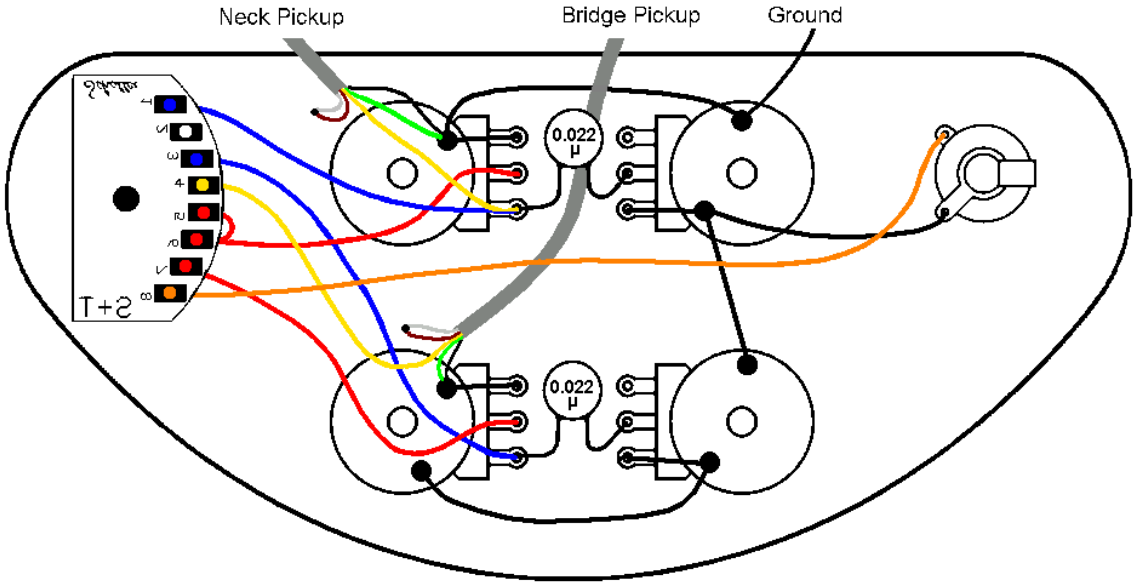
Electrical switching principle:



Wiring diagram:



Wiring after installing the switch:



Connections:

position

1 bridge humbucker, lower controls

2 both humbucker in parallel, upper controls

3 neck humbucker, upper controls

connection

1 hot connector neck humbucker and right connector volume neck

2 -

3 right connection volume bar

4 hot connector bridge humbucker

5, 6 grinder volume neck

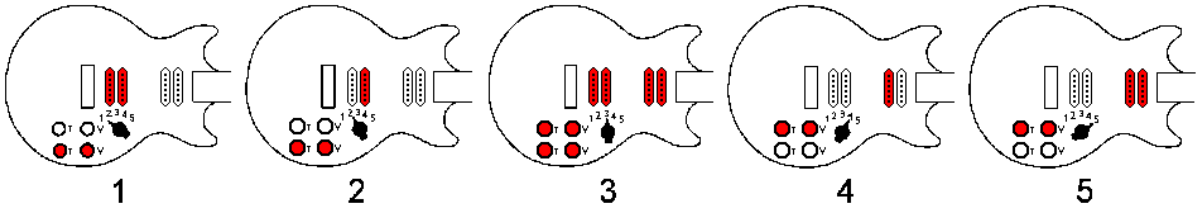
7 grinder volume bridge

8 output

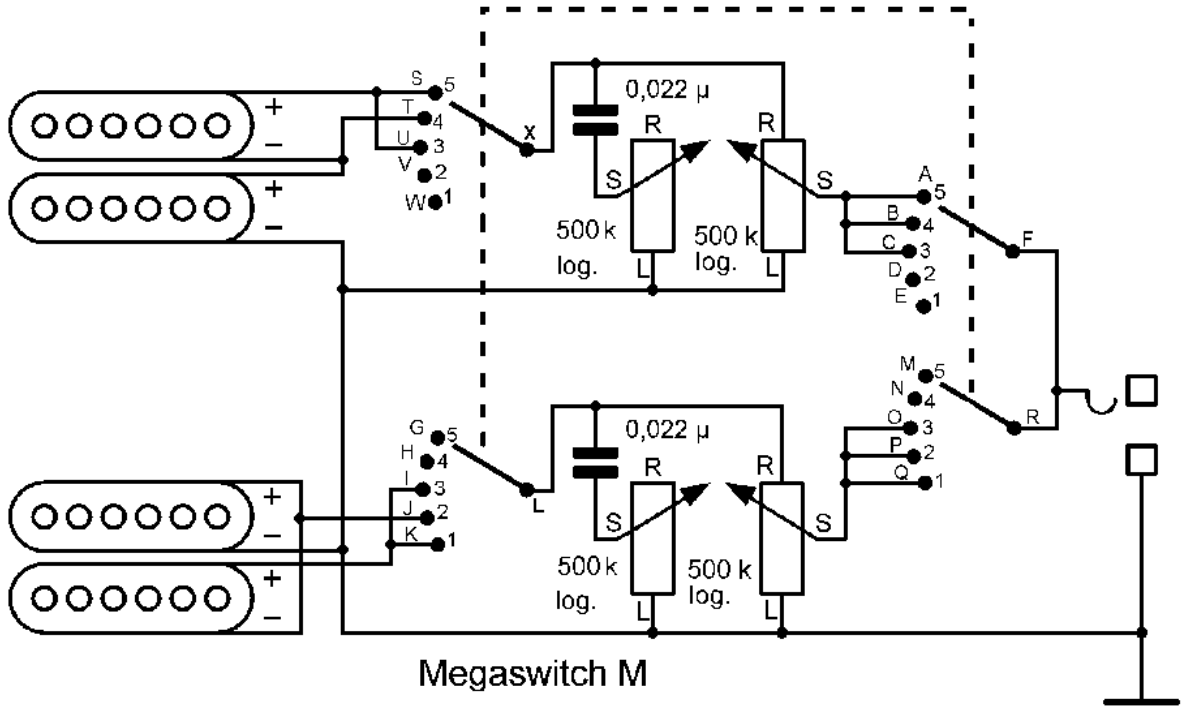
HH4P4. Five switch positions, two of them with humbucker splitting, Megaswitch M.

This circuit uses a Megaswitch M Rotary with five switch positions. In positions 2 and 4, the humbucker that is switched on is split. In position 3, the two volume controls are linked as usual. Installation advice: First solder the wires to the contacts on the top of the switch (A to L). Then mount the switch, then solder the wires on the underside (M to X).

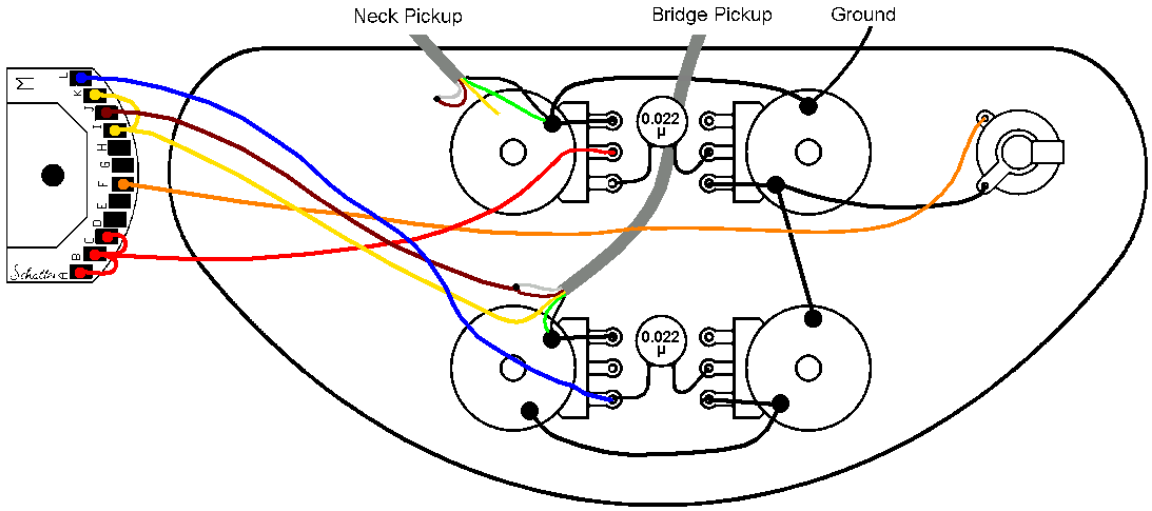
Switching functions:



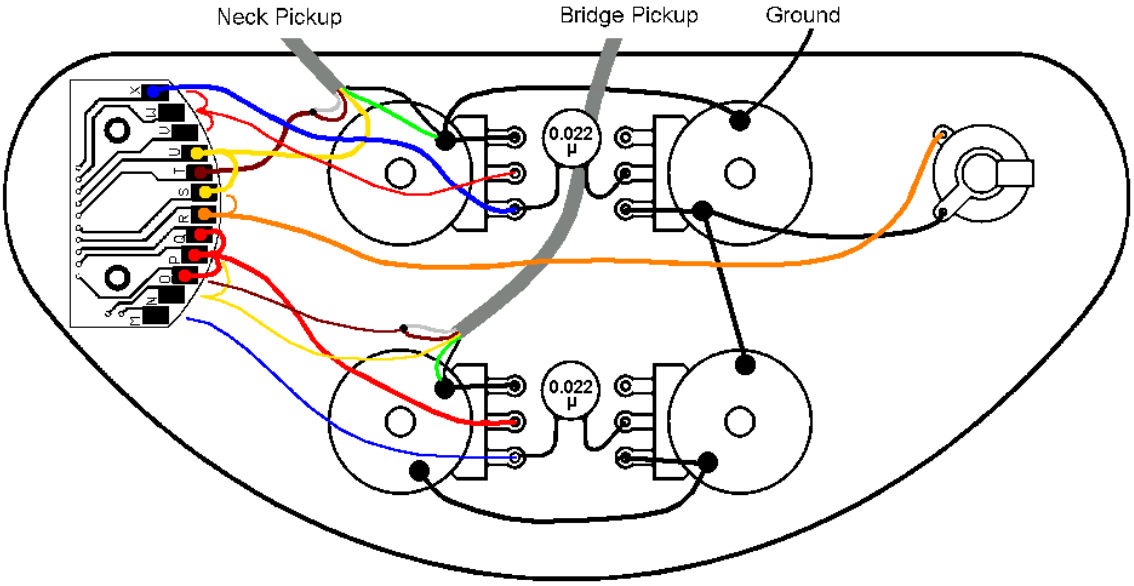
Electrical switching principle:



Connection of the switch, top:



Complete wiring after installing the switch



Connections:

position

1 Bridge humbucker

2 Bridge single coil inner coil

3 Both humbuckers in parallel

4 Neck single coil inner coil

5 Neck humbucker

connection

A, B, C grinder volume neck

D, E -

F exit

G, H -

I, K hot wire bridge

J Center tap on the bridge

L right connection volume bar

M, N -

O, P, Q slider volume bridge

R exit

S, U hot wire neck humbuckers

T center tap neck humbucker

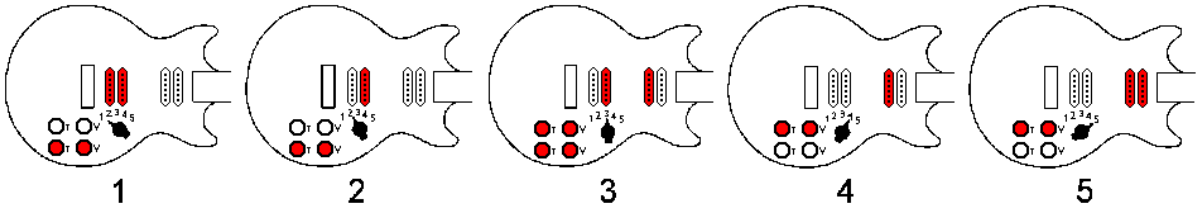
V, W -

X right connection volume neck

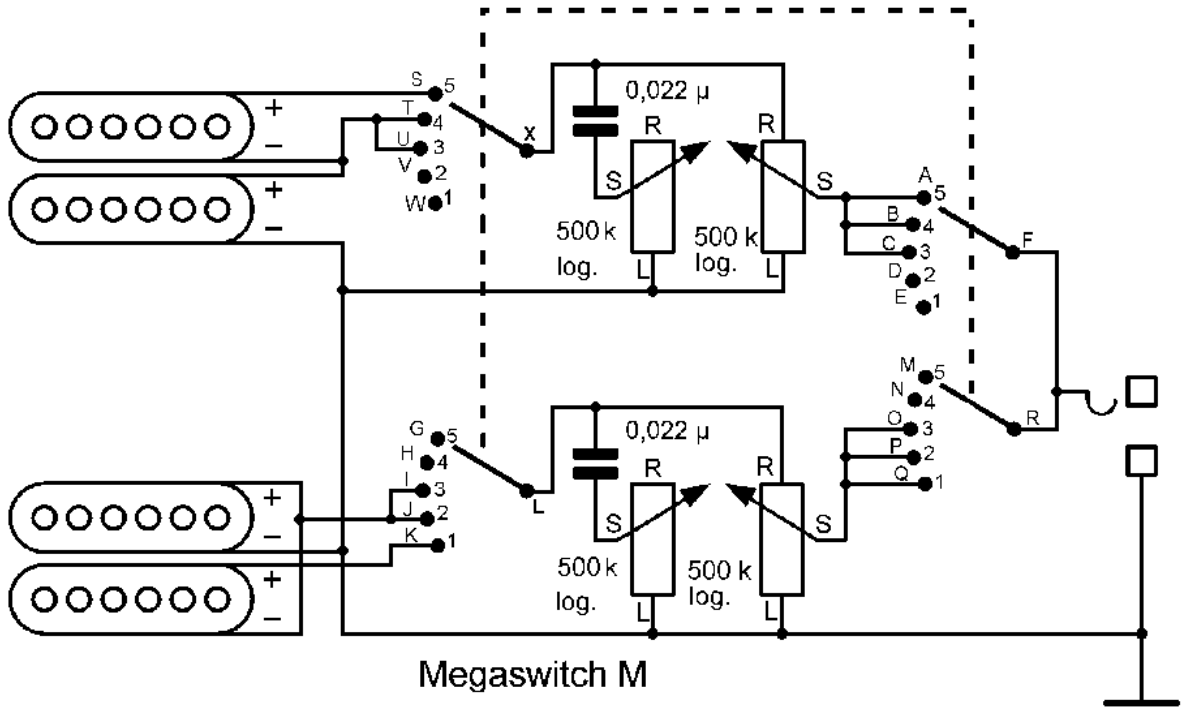
HH4P-5. Five switch positions, three of them with humbucker splitting, Megaswitch M.

This circuit is a modification of the HH4P-4. The positions 1, 2, 4 and 5 are as before, in position 3 both humbucker are split; the two volume controllers are linked as usual. A Megaswitch M Rotary with five switch positions is used here. Installation note: First solder the wires to the contacts on the top of the switch (A to L). Then mount the switch, then solder the wires on the underside (M to X).

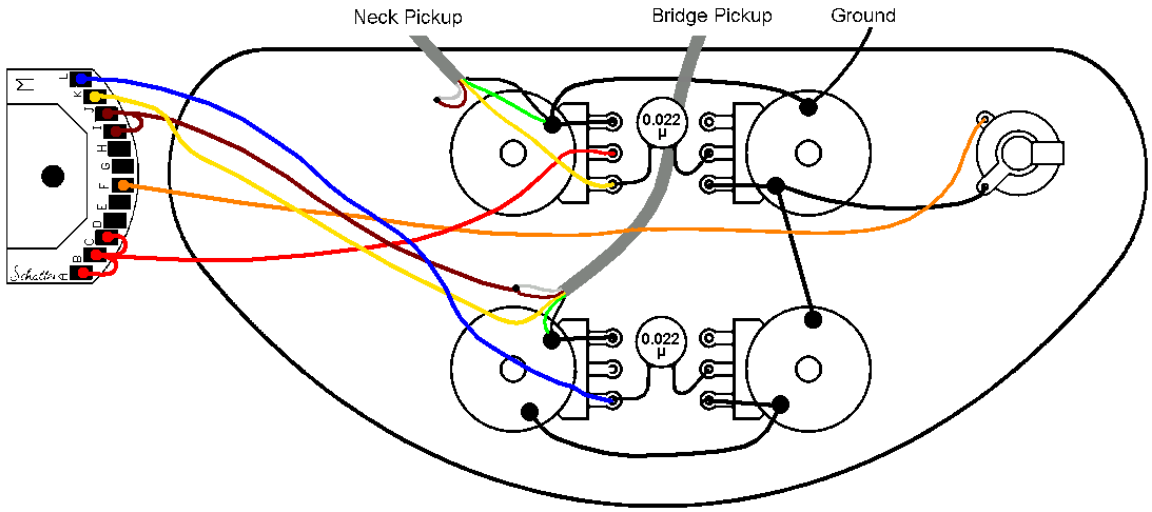
Switching functions:



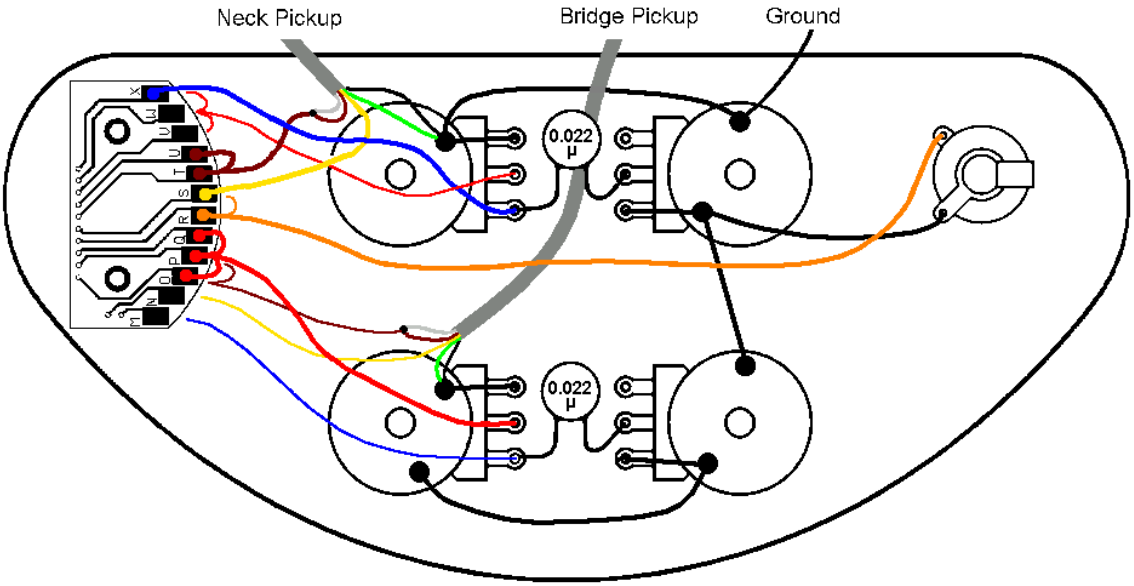
Electrical switching principle:



Connection of the switch, top:



Complete wiring after installing the switch



Connections:

position

1 Bridge humbucker

2 Bridge single coil inner coil

3 Both humbucker in parallel

4 Neck single coil inner coil

5 Neck humbucker

connection

A, B, C grinder volume neck

D, E -

F exit

G, H -

I, K hot wire bridge

J Center tap of the bridge

L right connection volume bar

M, N -

O, P, Q slider volume bridge

R exit

S, U hot wire neck humbucker

T center tap neck humbucker

V, W -

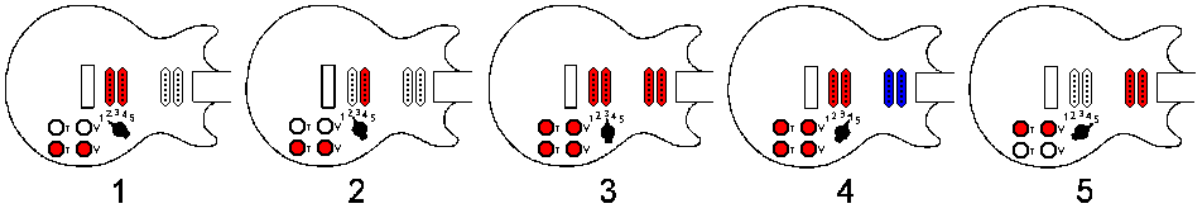
X right connection volume neck

HH4P-6. Five switch positions with antiphase and humbucker splitting,

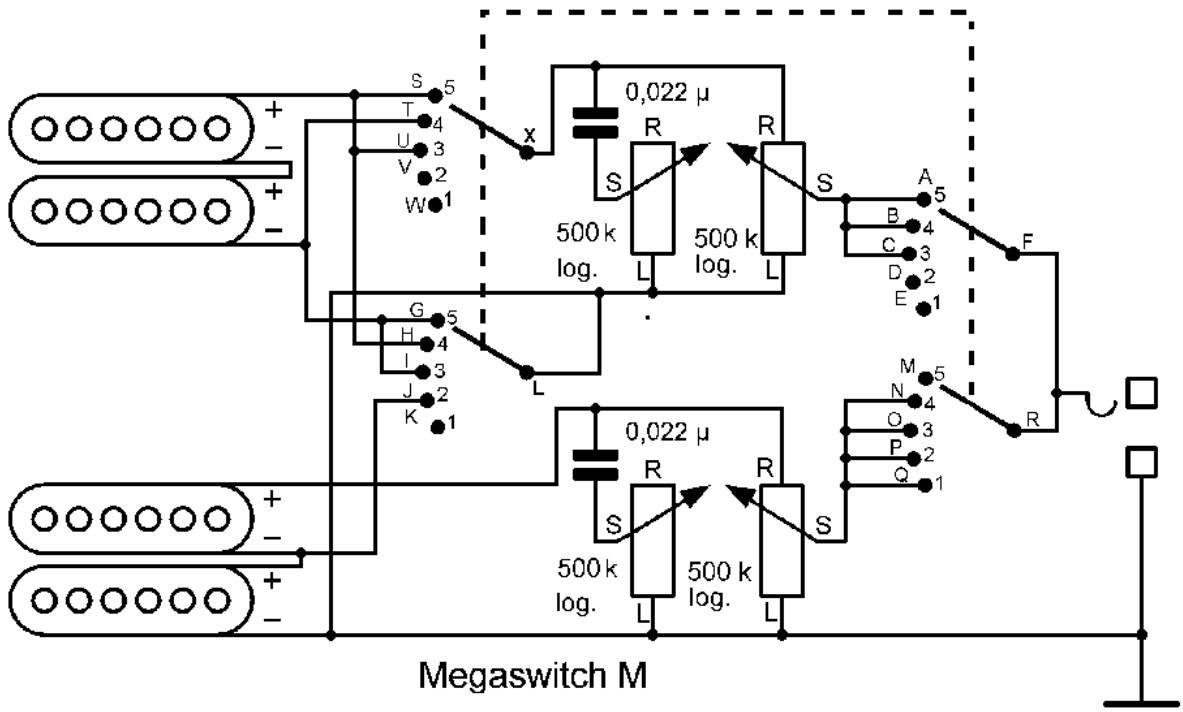
Megaswitch M

This circuit is particularly versatile. Positions 1, 3 and 5 are as usual. In position 2 the bridge humbucker is split. In position 4, both humbucker work out of phase. A Megaswitch M Rotary is used. Installation advice: First solder the wires to the contacts on the top of the switch (A to L). Then mount the switch, then solder the wires on the underside (M to X).

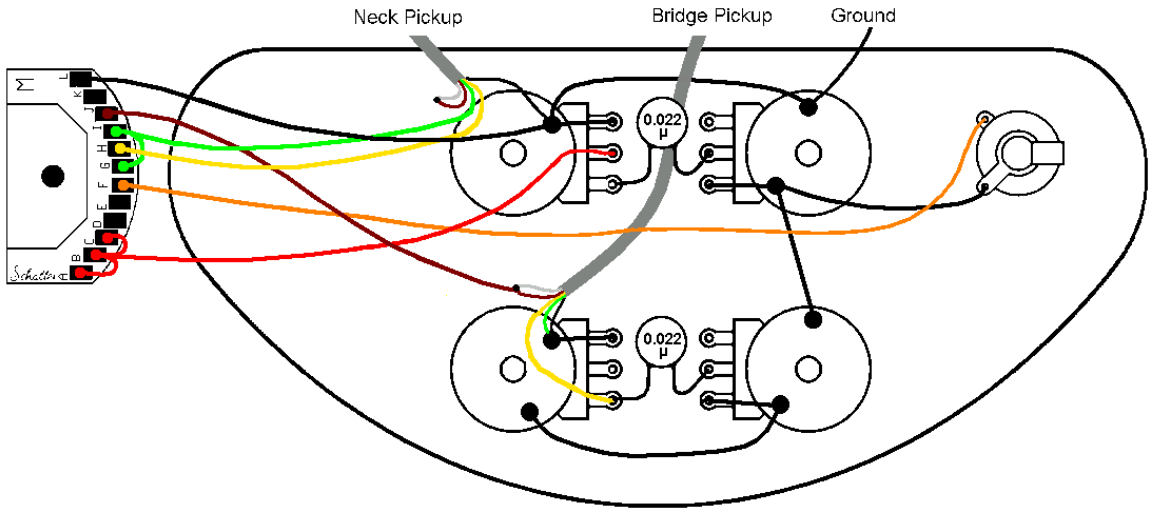
Switching functions:



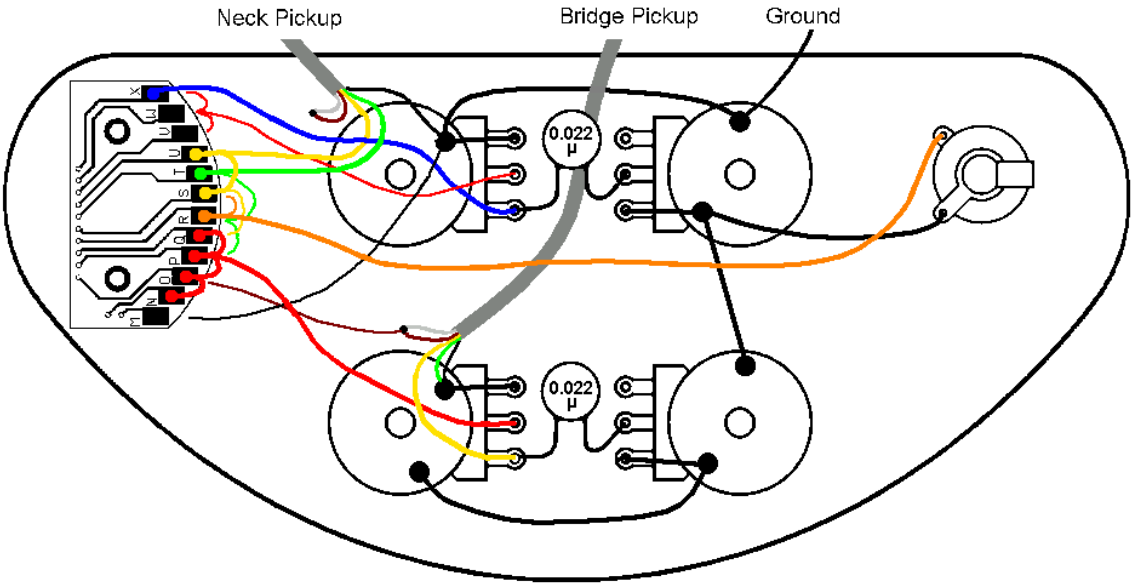
Electrical switching principle:



Connection of the switch, top:



Complete wiring after installing the switch



Connections:

position

1 Bridge humbucker

2 Bridge single coil inner coil

3 Both in parallel in phase

4 Both in parallel out of phase

5 Neck humbucker

connection

A, B, C grinder volume neck

D, E -

F, R exit

G, I, T cold connector neck humbucker

H, S, U hot connector neck humbucker

J Center tap of bridge humbucker

K -

L mass

M -

N, O, P, Q slider volume bridge

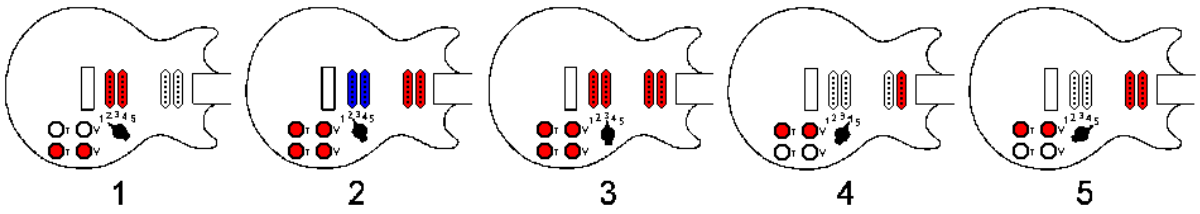
V, W -

X right connection volume neck

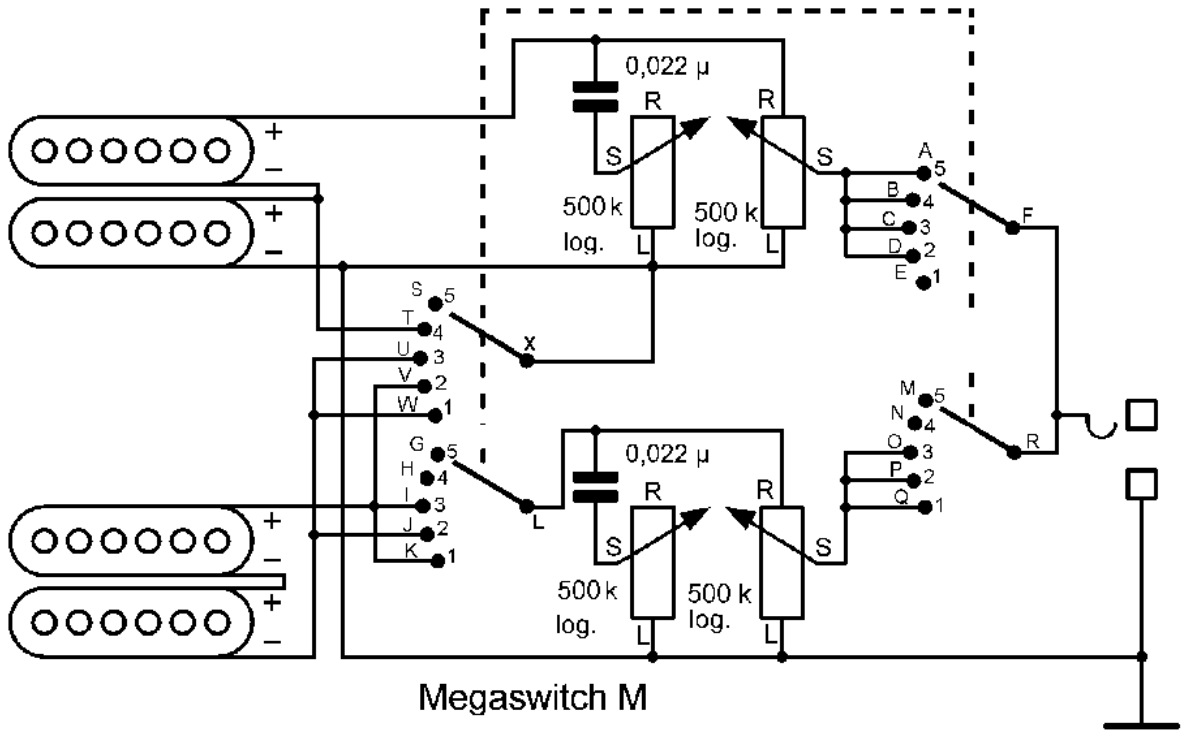
HH4P-7. Five switch positions with antiphase and humbucker splitting, Megaswitch M

This is a modification of the HH4P-6 circuit. Positions 1, 3 and 5 are as usual. In position 2, both humbucker work in antiphase. In position 4 the neck humbucker is split. A Megaswitch M Rotary is used. Installation advice: First solder the wires to the contacts on the top of the switch (A to L). Then mount the switch, then solder the wires on the underside (M to X).

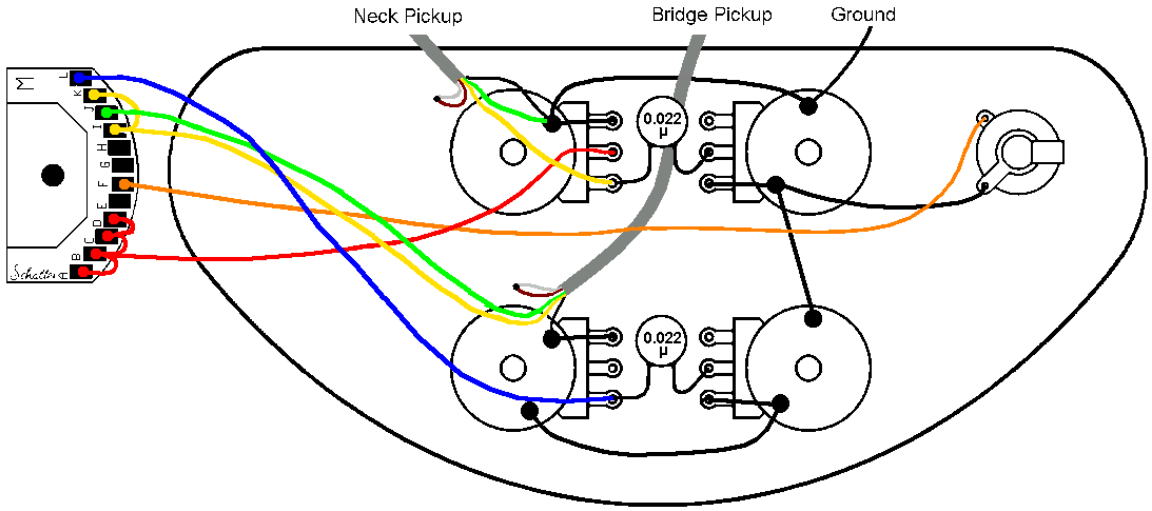
Switching functions:



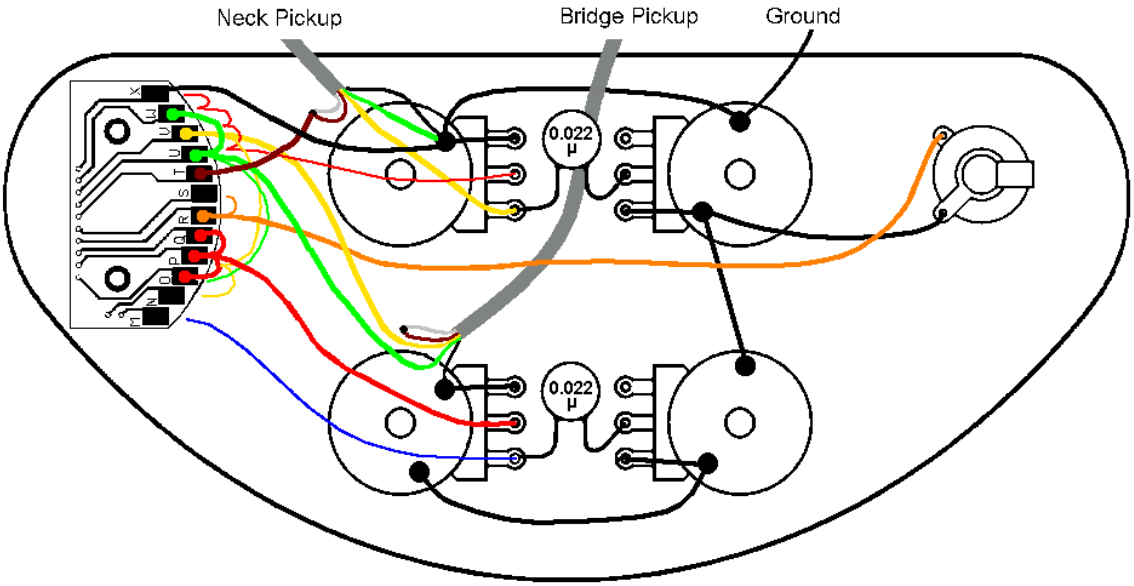
Electrical switching principle:



Connection of the switch, top:



Complete wiring after installing the switch



Connections:

position

1 Bridge humbucker

2 Both in parallel out of phase

3 Both in parallel in phase

4 Neck single coil outer coil

5 Neck humbucker

connection

A, B, C, D grinder volume neck

E -

F, R exit

G, H -

I, K, V hot connection bridge humbucker

J, U, W cold connection bridge humbucker

L right connection volume bar

M, N -

O, P, Q slider volume bridge

S -

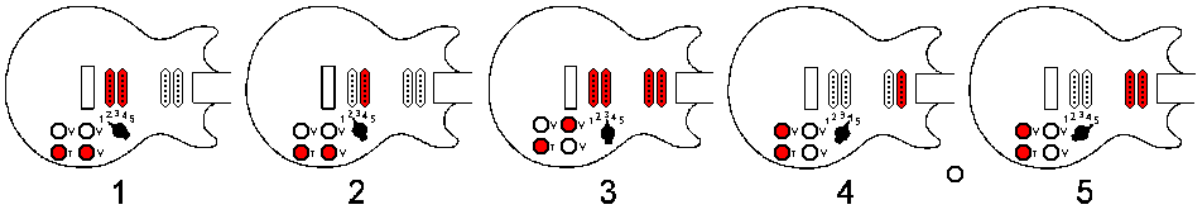
T center tap neck humbucker

X mass

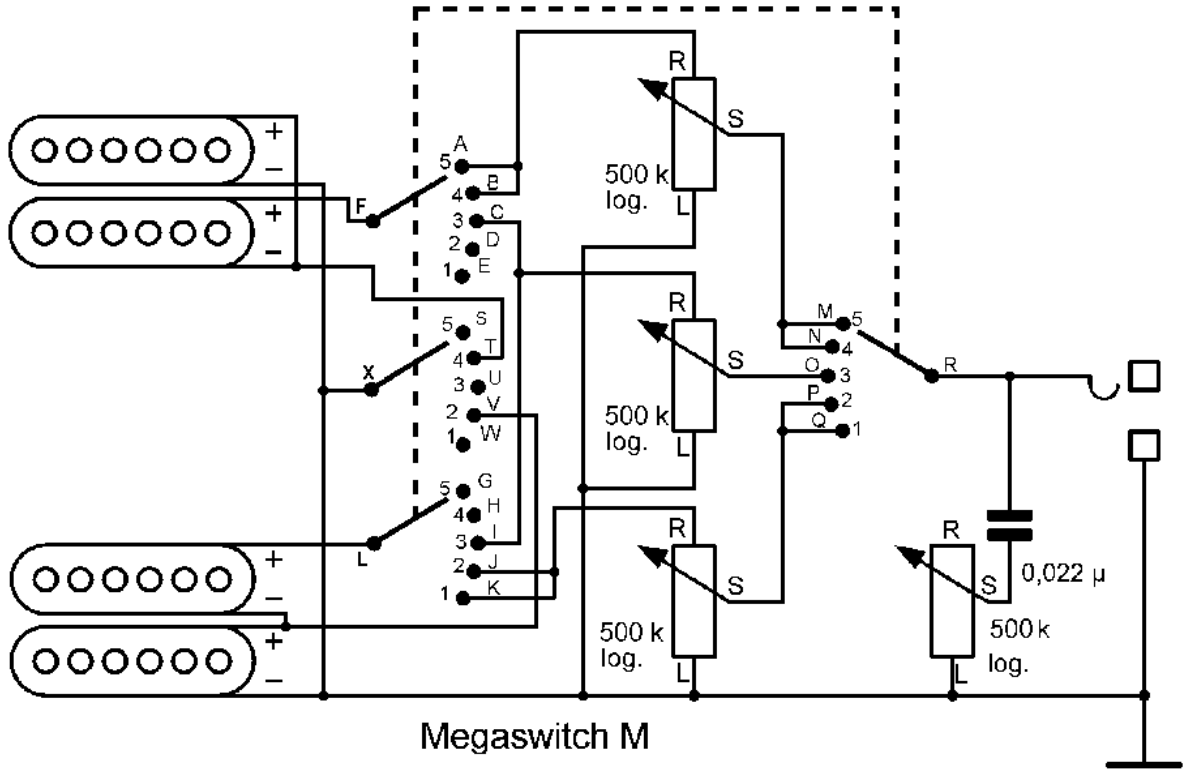
HH4P-8. Five switch positions, three volume controls

With this circuit, three different volumes can be preselected and selected with lightning speed with a Megaswitch M Rotary: bridge humbucker (also split), both humbucker in parallel, neck humbucker (also split). The tone control affects everyone here. Installation advice: First solder the wires to the contacts on the top of the switch (A to L). Then mount the switch, then solder the wires on the underside (M to X).

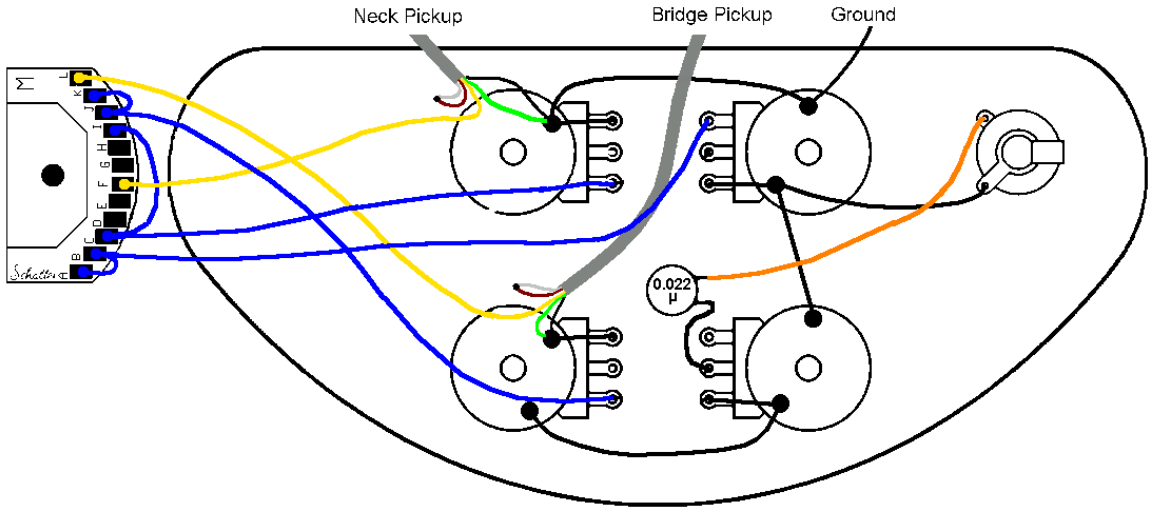
Switching functions:



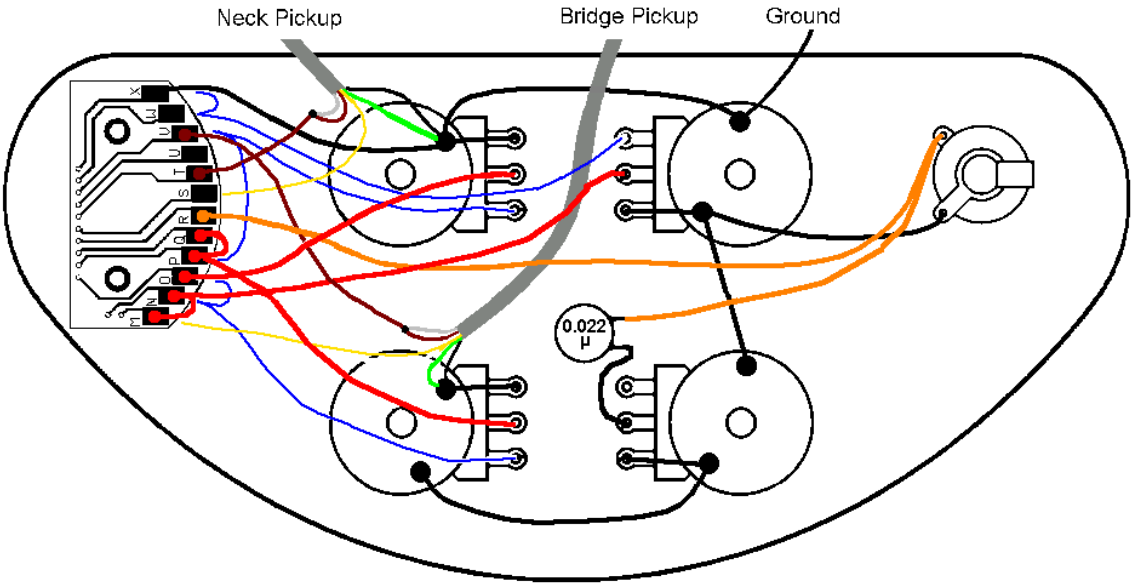
Electrical switching principle:



Connection of the switch, top:



Complete wiring after installing the switch



Connections:

position

1 Bridge humbucker

2 Bridge single coil inner coil

3 Both humbucker

4 Neck single coil inner coil

5 Neck humbucker

connection

A, B right connection volume neck

C, I right connection volume both

D, E -

F hot connector neck humbucker

G, H -

J, K right connection volume bridge humbucker

L hot connector bridge humbucker

M, N grinder volume neck

O grinder volume both

P, Q slider volume bridge

R exit

S, U, W -

T center tap neck humbucker

V Central tapping bridge humbucker

X mass