DiMarzio® 4-Conductor Pickup Instructions

For all DiMarzio pickups with side-by-side coils

Please Note - if you have no previous experience with wiring or feel uncertain how to proceed, we recommend having a professional do the pickup installation.

General Instructions
If you have purchased our pickup to replace one that is currently in your guitar, do the following:
- Remove your old pickup carefully. Installing your new pickup will be much easier if you uninstall your original pickup cleanly, rather than cut its wire. Make a note of exactly where the old pickup was connected as, in most cases, the new one will connect to the same place.
- Use a soldering iron with a fine tip (25 to 45 watts) and thin rosin core solder for all connections. If you intend to use a miniature switch with the pickup, use a high quality switch and try to solder as clean as possible with the solder connections to avoid short circuits or damage to the switch.
- To take full advantage of your new pickup, we strongly recommend using DiMarzio parts and hardware. DiMarzio offers two push/pull miniature potentiometers, the EP1200PP (250K) and the EP1210PP (500K). Both of these controls are suitable for volume or tone, with double-pole, double-throw miniature switches built in.

IMPORTANT: although other brands of pickups may have the same color wires as ours, the connections are not necessarily the same. For our pickup to function properly, you must follow these instructions.

Standard Humbucking Series Wiring
All DiMarzio 4-conductor pickups have red, black, green and white wires. The standard wiring for most humbuckers is series humbucking. To do this, solder the BLACK AND WHITE wires together. Cover the solder connection with tape so as not to touch any other part of the circuit. Solder the RED wire to the hot connection on the guitar’s circuit. In most cases where you are replacing a pickup, the RED wire will be soldered to the same place as the hot, or center wire of the original pickup. The GREEN and BARE wires are soldered to ground. Usually, this connection is made to the back of a control. When connecting the BARE wire to ground, make sure it does not come in contact with any other connections.

Standard Humbucking Parallel Wiring
There is a second way to wire a humbucking pickup, with the two coils in parallel. The pickup will still cancel hum, but it will be slightly less powerful, with more highs and an overall cleaner sound. To do this, solder the BLACK AND WHITE wires together. This will be the hot connection. Solder the GREEN AND BLACK wires together. This will be the ground connection. The bare wire will also be grounded. If you need to wire the pickup for reverse phase, the GREEN AND BLACK connection will be hot and the RED AND WHITE connection will be ground. The bare wire will still be grounded.

Dual Sound
This wire should produce two sounds. One is with the pickup coils in series for maximum power. The second sound is with the coils in parallel. Parallel wiring is not the same as turning one coil off. Turning off a coil means the pickup to no longer humbucking, and no longer cancels hum. A single sound wiring cancels hum in both positions. A double-pole, double-throw DPDT switch is required. To reverse the phase of the pickup, use pole 4 as the ground, and the GREEN wire to hot. An interesting feature of this arrangement is that the phase switch has two functions:
- When two pickups are wired together, it performs its normal task.
- When the pickup shown above is on alone and the single-coil switch is on, the phase switch determines which of the two coils is turned off, giving a subtle variation in tone. Phase switching should not be combined with coil tapping or HS™, APT™ and Virtual Vintage™ models. In one position, it will turn only the bottom coil on, producing almost no signal.

Treble Compensation
Many players notice a loss of high frequencies when the volume control is turned down. To avoid this, install a 560pF capacitor alone or with a 300K ohm resistor (270K or 330K will also work) in parallel across the two “hot” legs of the volume control, as shown in the drawing. Try to solder these components clearly to the legs of the volume control, without breaking the solder connections that are already present.

Dual Sound with Single-Coil Switching
Following the same diagram above, you can use a three-position (on-on-on) DPDT switch (DiMarzio EP1106 or a push-pull pot (EP1200PP or EP1210PP)) for the 4-conductor cable is always soldered to ground.

Phase Switch
Phase switching can only function in an instrument with two or more pickups. The switch will only occur when both pickups are on, and will be most obvious when the pickups are approximately the same volume. Only one of the pickups should be wired to the phase switch. This will provide no audible difference which pickup you choose. The switch should be DPDT, the same type as for Dual Sound (DiMarzio EP1106) or push-pull pot (EP1200PP or EP1210PP)).

Component Values
500 Kohm is the most common resistance value most guitar companies and players employ with humbuckers for both volume and tone controls. Using 250 Kohm controls will result in a little warmer sound and a slight drop in power. DiMarzio® also offers a 1 Megohm tone control (DiMarzio EP1202) which slightly increases treble response and power. This control can be combined with either 250 Kohm or 500 Kohm volume controls. We recommend .022 µF for the capacitor on the tone control.

Additional Notes
Wiring diagrams and technical information may be found on our website: www.dimarzio.com

If you have any questions or problems, please call our tech line, (718) 816-9112 between 12:00 PM and 5:00 PM Eastern Time or submit a request for technical support on our website.

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