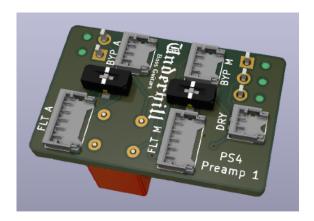
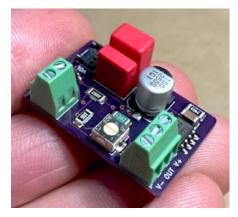
User Manual PS5 Single Preamp

Overview

The PS5 Single Preamp is a single channel bass preamp for use in single pickup basses, or when a passive switching or blend control will be used before the preamp. With just a volume pot, the PS4 can be used as a stand-alone preamp for a clean and natural sound with the advantage of active output for no tone degradation with low volume or long cables. The input has a 0-6dB gain adjustment for boosting signal output.





There are two filter connectors on the PS5 that are arranged in series. Any filter module may be plugged into either position. An FT5 Treble Boost filter can be combined with an FS or FV filter by connecting it to the M position, and using the additional DRY connector. Both filter connections have an onboard bypass switch and corresponding connector for an external bypass switch.

Jack Connections (Fig. 1)

V- is the system ground. This should be connected to the actual ground on the bass, preferably the SLEEVE terminal on the jack. The battery minus wire should be connected only to the RING terminal of a stereo jack. This connects the battery minus to the instrument's ground only when a plug is inserted in the jack, so that the preamp is powered off when the plug is removed.

V+ is the positive wire from the battery or batteries. This should be directly connected to the preamp if the power switching is done with the jack.

OUT is the final signal from the preamp that is connected to the jack tip and sent out the cable.

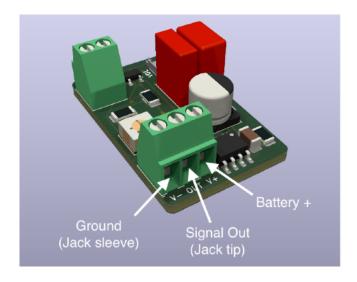


Fig. 1 - Jack Connections

Pickup Connections (Fig. 2)

P- is the basses real ground. The negative coil wire and shield wire (if present) should be connected here. Some pickups have the shield connected to one of the two signal wires, and you should connect that side to **P-**.

P+ is the positive coil wire. The signal polarity can be swapped as long as the shield can be connected to the **P-** minus side.

The three wire cable from the volume pot is connected to the VOL connector in Fig. 2.

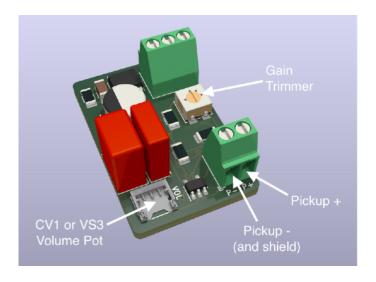


Fig. 2 - Pickup Connections

Gain Adjustment

Gain is adjustable from 0-6 dB using the trimmer (Fig. 2). Use a small screwdriver to carefully turn the adjustment pot. If the basses output is weaker than normal (i.e. with a low output pickup) then you can turn the trimmer up to increase output. Make sure to test your gain settings thoroughly with a fresh battery and any installed filters set to maximum boost levels.

Bypass Configuration (Fig. 3)

The PS5 has a filter bypass system that can be used in many different ways with external bypass switches. You can quickly switch off filtering/EQ for recording or using outboard equipment. You can carefully craft a tone with the EQ, then quickly switch between an uncolored tone and the filtered tone without disturbing the settings. The treble boost switch for the FT5 Filter simply operates the bypass for the filter slot it is plugged into.

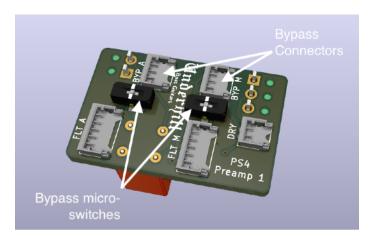


Fig. 3 - Bypass

There are two on board micro-switches and switch connectors (corresponding to each filter connection) that configure the bypass modes. The switch settings (viewed as in Fig. 3) are as follows:

MODE	Micro Switch
Filter OFF, no external switch (or no filter installed)	LEFT
External switch installed.	CENTER
Filter ON, no external switch.	RIGHT

BE SURE TO SET THE SWITCH TO THE CENTER POSITION IF YOU HAVE AN EXTERNAL SWITCH INSTALLED, or the circuit may misbehave if the two switches are "fighting".

Installation

When connecting the jack and pickup wires to the preamp, it may be a good idea to trim and tin the wire ends with solder. Tighten the screws *firmly* and tug on the wires to check the connections. Attach the volume pot to the preamp for testing.

At this point, it is a good idea to set all of the bypass micro-switches to the left (as in Fig. 4) and test the preamp. Plug in the bass and make sure the volume is working. If nothing happens, push all of the connectors flat with a finger, or re-seat them. Check the battery voltage and jack connections, and verify the bypass switches are set LEFT. If you still can't get it to work, then contact us and we will help you troubleshoot.

Now set the micro-switches to the desired bypass positions and plug in the filters and bypass switches (if any). Follow the instructions in the filter's user manual to configure and test the filters individually and troubleshoot their connections if there is a problem.

Finally, cut a piece of 3M "Command" refill material or double-stick foam tape and attach the preamp. Move it around to find a good location to attach it to the control cavity. The preamp board can be mounted horizontally to the side of the cavity, or vertically to the bottom of the cavity, using the large red capacitors on the board or the green screw terminals as an attachment surface. These components are flush with the board edge for that reason, and are quite robust as an attachment point. Make sure no soldered components are touching shielding or other metal parts. Check all the cable connections again by pushing them flat with your fingers.

Specifications

The PS5 Preamp has the following specifications:

Supply voltage 9-18V DC

Input Impedance (each pickup) 220 kΩ

Channel Gain 0-6 dB

Idle Current 0.65 mA

Dimensions 30 x 21.5 x 14 mm