

## Suggested modifications for improving sound quality when dwell 1 is at max in the BJJ Uni Reverb v1.3 and previous versions

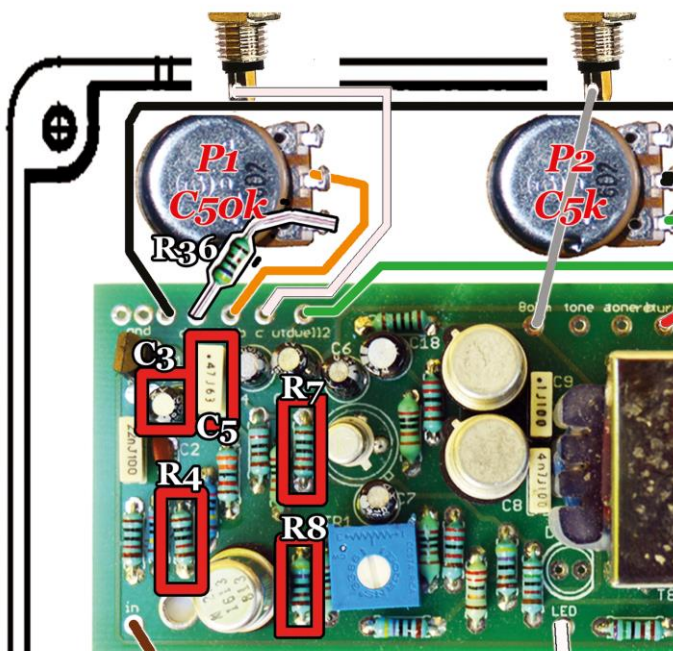
Some users have mentioned that there is a volume drop when the dwell 1 knob is turned to max in the BJJ Uni Reverb version before 1.3.3. There are few mods that you can try, and most of them are done in the version 1.3.3 built on the jun21 board.

Simplest is of course to limit the range of the dwell 1 knob, so that the max position can't be dialled in. Take a look at the image below in which we have replaced the grey wire, between hole dw1a on the board and pin 3 on P1, with a resistor. If the resistor is big enough, the max position that is now possible to set, does not include the position in which you can hear a volume drop. Try  $R36=1k5$ . This mod is not done in the latest version.

A better solution is to lower the output impedance of the first stage, the one based around T1, so that it can drive the following stages without any problems, even when the resistance of the dwell 1 is 0 (turned to max). This can be done by lowering the resistor R3 on the board. Try  $R3 = 2k2$ . This is done in version 1.3.3

To load down stage T1 even less, you can increase the input impedance of the stage T3 by replacing caps and resistor on the board. The resistors biasing the stage T3 can go up by a factor 10 (make  $R7=100k$  and  $R8=47k$ ). To keep the cut off frequency the same C5 can be lowered by a factor 10. Try  $C5=47nF$ . This is also done in v1.3.3

Lowering the capacitor C3 will limit the lowest frequencies from the guitar to reach the stage T2. Try  $C3=470nF$ . Also done in latest version.



R4 - lower R4 from 10k to 2k2 (recommended first modification)

C3 - lower C3 from 4u7 to 470 nF

C5 - lower C5 from 470nF to 47 nF

R7 - raise R7 from 10k to 100k

R8 - raise R8 from 4k7 to 47k.

R36 - replace the grey wire with a 1k5 resistor. Make sure it does not come in contact with the cover of the pot!