

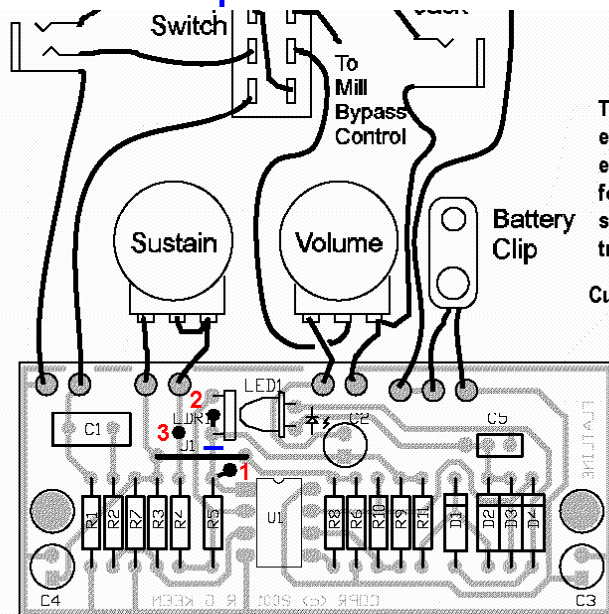
Converting a Flatline Compressor to a Punchline Expander

John Hollis' simple compressor, the "Flatline" can be easily converted into a dynamic expander by relocating one end of the LDR.

Normally, the LDR is placed in parallel with R5 (220k) so that on peaks the overall parallel resistance of the LDR and R5 is reduced. This decreases gain to produce a compression effect.

If LDR is placed in parallel with R4 (10k), reductions in the combined parallel resistance of LDR+R4 will *increase* the gain. This will produce a dynamic enhancement or expansion effect.

Please note that with no other changes to the circuit than those described here, it **WILL** be much louder. You may wish to change some of the gain-setting components to compensate for this.



To change the Flatline into a "Punchline" expander, you only need to reroute one end of the LDR. Using RG Keen's layout for the Flatline, note locations **1, 2, & 3**, shown here, and the additional pads and traces, shown in dark gray.

Cut or eliminate the trace where the blue line is.

The added pad/trace at **2** can either be jumpered to the pad at **3** if all you want is an expander, or it can go the centre lug on a SPDT toggle switch to have the option of compression or expansion.

When the toggle connects pads 2 and 3 you'll get expansion. When it connects 2 and 1, you'll get compression.

The SUSTAIN pot will now control how much extra gain is provided on peaks; the degree of expansion.

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