

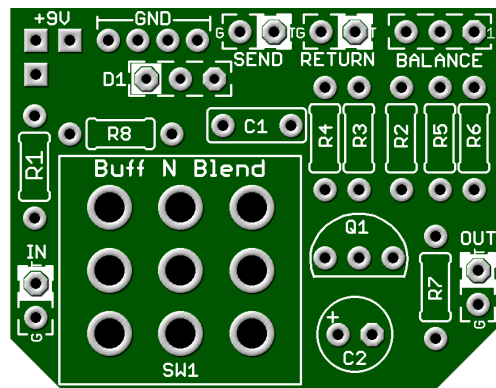
Buff N' Blend

Here are a few reasons the Buff N Blend can give your builds Tonal Superiority.

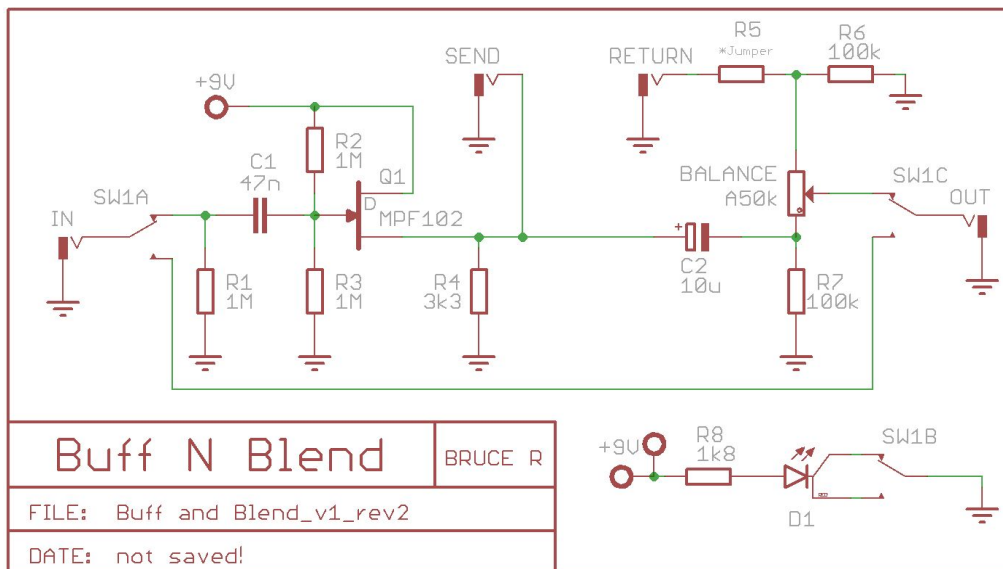
- Great definition and thickness
- More complexity to your final mix
- Add more amp like tones to thinner sounding pedals
- By never fully clipping your waveform you can now stack multiple pedals
- By blending and stacking, create huge sounding riffs simulating two separate amps
- Great for solo guitarists by filling out your sound with complex tones
- Bass guitarists can add more bottom end back into the mix making favorite pedals Bass friendly
- Join the ranks of leading builders who are now adding a Blend Control to the latest pedals

Modulation: In regards to modulation, did you ever have a Phaser, Flanger, Delay or Chorus that was either too dominant or brittle sounding? Now you can add any degree of clean tone by blending in the natural warmth of your amplifier. You can even subdue an over active circuit with just a twist of a knob!

Board design and layout by Bruce R. based off an idea 2003, by Joel Purkis



| Part | Value | Part | Value |
|------|---------|---------|----------------------------|
| R1 | 1M | BALANCE | A50k aka Blend |
| R2 | 1M | C1 | 47n |
| R3 | 1M | C2 | 10u |
| R4 | 3k3 | D1 | CA Bicolor or Standard LED |
| R5 | *Jumper | Q1 | J113 or MPF102 |
| R6 | 100k | | ** Socket transistor. |
| R7 | 100k | | |
| R8 | 1k8 | | |



Build Notes

***R5:** If the output from the effect(s) in the loop overpowers the input signal, replace the jumper with a resistor value somewhere between 10K and 100K. I have not experienced needing anything above 10k.

**** Q1 - J113 or MPF102 are both excellent choices for a transparent buffer. We encourage you to either purchase a J113 (genuine transistor) from our SHOP or buy from a very reputable dealer.**

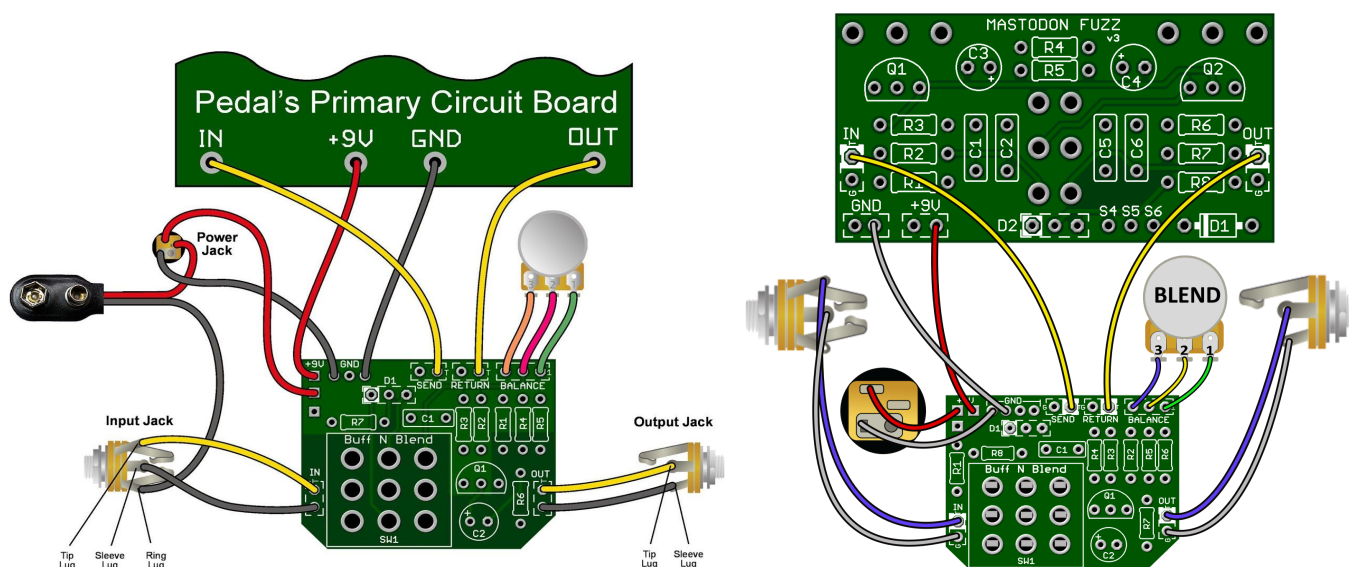
The **Buff N Blend** splits the original signal into two paths. One path sends a non-inverted signal to the blend pot. The other path routes the signal through a Send and Return loop that permits the injection of 1 or more external effects.” When these two paths are recombined at the Blend pot if there is a difference in phase, phase cancellations **“may”** result. If the effect results in a change in phase then the resulting output may exhibit phase cancellation, which in some cases may be a preferred result. If not there are ways around this.

There is much information to help answer “Phase” questions. The discussion thread below has a decent list for circuits that invert the phase. That said a vast majority of popular circuits do not invert the phase. For more information read below.

Here is a link that lists pedals that invert the phase. For pedals that invert the phase, you can still use the Buff N Blend: [Pedals that invert the phase.](#)

For pedals that do invert the phase you can still use a Buff N Blend: Since the **Stage 3 circuit** inverts a signal, simply add a **Stage 3** in the effects loop of the Buff N’ Blend! That will change an inverting pedal signal back to a non-inverting signal when returning to the Buff N’ Blend. Or add any other inverting effect to the loop. Two inverting effects equal one non-inverting signal.

GuitarPCB also carries the larger and feature rich **Paramix** board for putting many pedal circuits in a loop w/ Mix and Phase function.



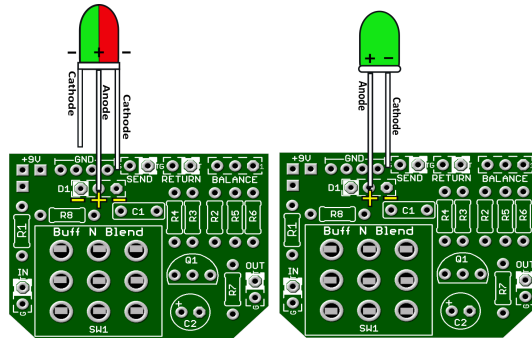


Be sure your In/Out Jack wiring is correct. A Stereo Jack (for battery use only) has a RING lug which is used to connect to the battery ground. If you do not intend to use a battery there is no need for a Stereo Jack. If using Stereo then only use the Tip and Sleeve lugs. S4, S5 & S6 is only needed when the LED is wired to the Main Board.

STATUS LED

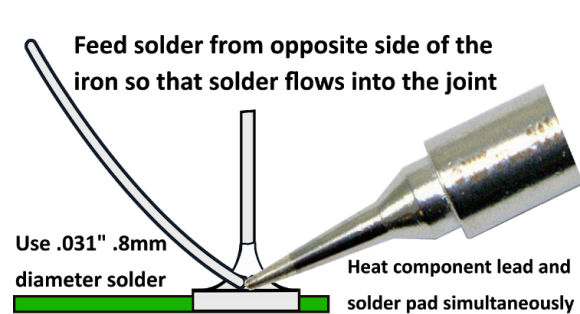
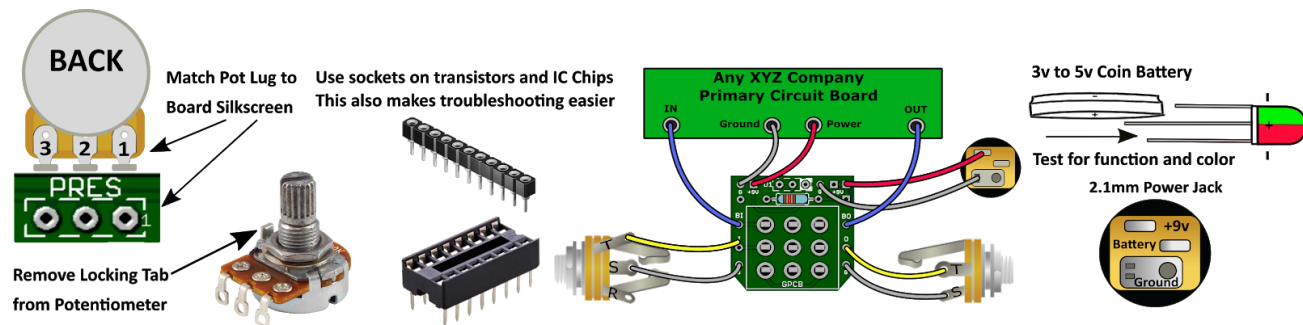
Insert the LED leads into the corresponding pads as shown.

TIP: Use a 3v to 5v coin battery to test your LED before installing. **Note:** 9v direct without a CLR will blow the LED.



Note: If wiring the LED to the Buff N Blend board no need to connect S4, S5 & S6 or populate the LED or (CLR) on the main board since you are wiring your LED directly to our Buff N Blend board.

Direct Online Link: [3PDT Wiring Board Build Document](#)



A good solder joint should be shiny and look like this:

- * Carefully re-flow suspect solder joints.
- * Clean and tin your Tip regularly.

When soldering wire to the board push the protective PVC jacket flush with the board and pad.

Use the right tools for the job and be patient.

If you need help ask questions first at the GuitarPCB forum.

We are there to help and we know our products best.

Soldering Tutorial on Youtube

Need a kit? Check out our authorized worldwide distributors:

USA – Check out [PedalPartsAndKits](#) for all your GuitarPCB kit needs in the USA.

Europe – [Das Musikding](#) Order either boards or kits direct from Europe.

[PedalPartsAustralia](#) - Order either boards or kits direct from Australia

If they do not have a KIT listed send them a note asking if they can help you out.



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