3PDT True Bypass Daughterboard: Build Document

Carcharias Effects
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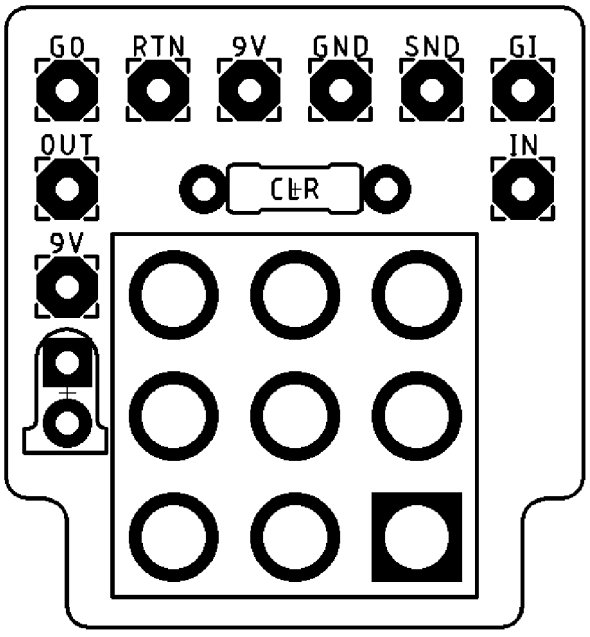
1. About This Circuit

I love the unadulterated tone of my instrument, and I am sure you do too. And even if you don't, I still believe this world hasn't gotten so crazy that we can't all agree on the same basic principle that a pedal shouldn't be affecting your sound when it is switched off. So as a pedal builder that makes me a big proponent of the true bypass switching mechanism. And because most of the pedals I build use this mechanism, I like not having to think about a wiring strategy each time I build a new pedal. That's where these 3PDT True Bypass Daughterboards come in.

These daughterboards make wiring 3PDT for true bypass simple, clean, and quick—a must for any DIY builder looking to save some time. It also includes an extra pad for the DC connection, in case you want to wire your circuit board directly to the 3PDT True Bypass daughterboard (instead of directly to the power jack).

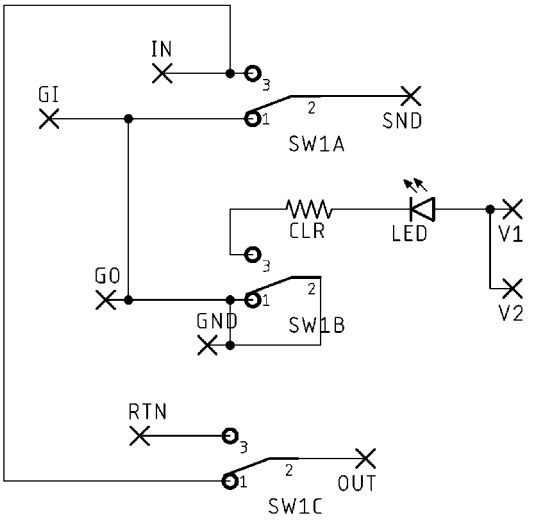
2. Circuit Board

The following is a screen capture of the **bottom side** of the printed circuit board (PCB) — make sure that when you wire your PCB, that the **logo** side is facing up so that the input/output jacks are closer to their wiring pads:



3. Schematic

The following is a screen capture of this circuit's schematic, which can be used for reference when debugging:



4. Bill of Materials

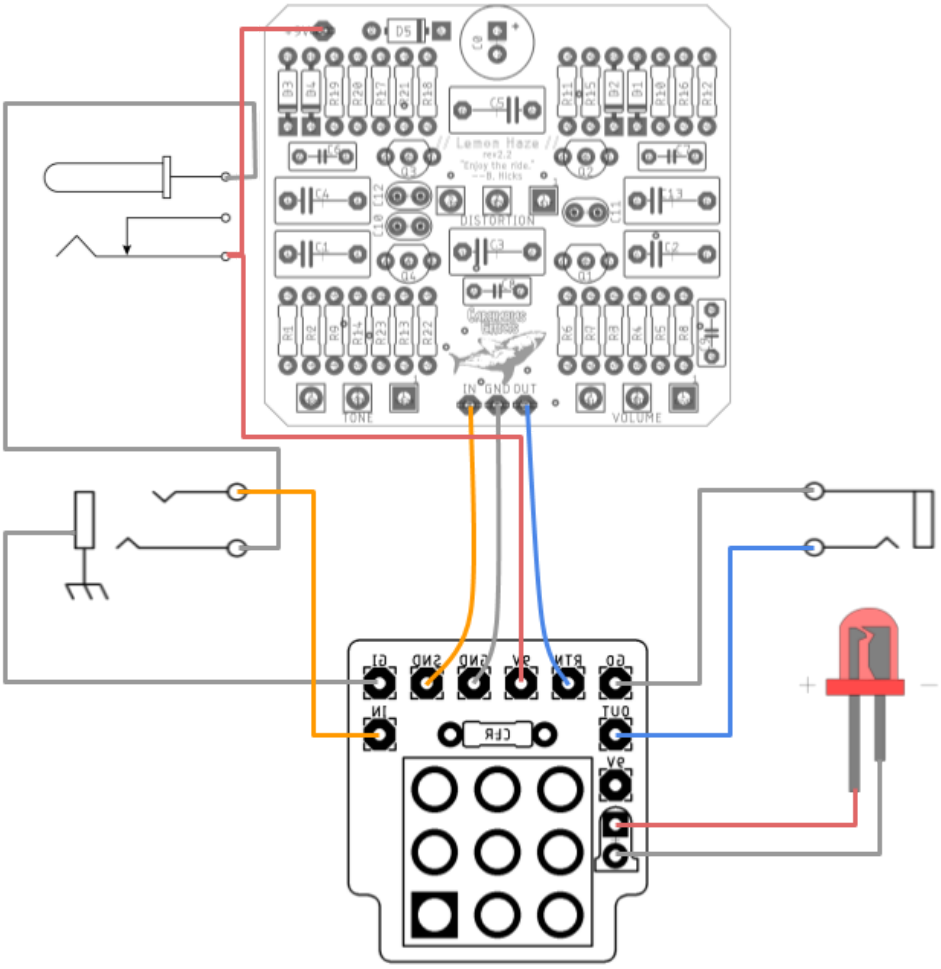
You will need the following components to complete your build:

Qty	Value	Parts	Description
1	3PDT	3PDT	3PDT Stomp Switch
1	LED	LED	LED
1	1.5K	CLR	Resistor

5. Build Notes

The wiring is pretty intuitive, just refer to the table and diagram below:

Abbreviation	Name	Connection
GO	Ground - Output	Output jack ring (ground) lug
OUT	Output	Output
9V	9V	Power jack
RTN	Return	Circuit output
GND	Ground	Circuit ground pad
SND	Send	Circuit input
GI	Ground - Input	Input jack ring (ground) lug
IN	Input	Input jack tip lug



Note that in the diagram above, the 3PDT daughterboard is reversed. Just make sure that the Carcharias Effects logo is facing up when you implement the daughterboard so that the wiring follows this diagram.

Terms of Use

The printed circuit board (PCB) discussed herein may be used for DIY purposes, such as personal builds or small commercial operations. This PCB may not be resold as part of a commercial kit. Resale from peer to peer is approved.

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Change Log

- **Rev1 (August 19, 2020):** First draft of this document, includes all standard features. This document corresponds to **PCB rev1.0**.

Contact

If you encounter any problems or issues with the PCB, or have any questions or comments, feel free to reach out to me anytime. I will try my best to be as responsive as possible. Here are the best ways to reach me:

- Instagram/Facebook (DM): **Carcharias.Effects**
- Email: carcharias.effects@gmail.com
- Web: www.carchariaseffects.com/contact

I **love** seeing pictures of other peoples' builds, so feel free to tag me (**carcharias.effects**) on Instagram or Facebook.

Best of luck and happy building!