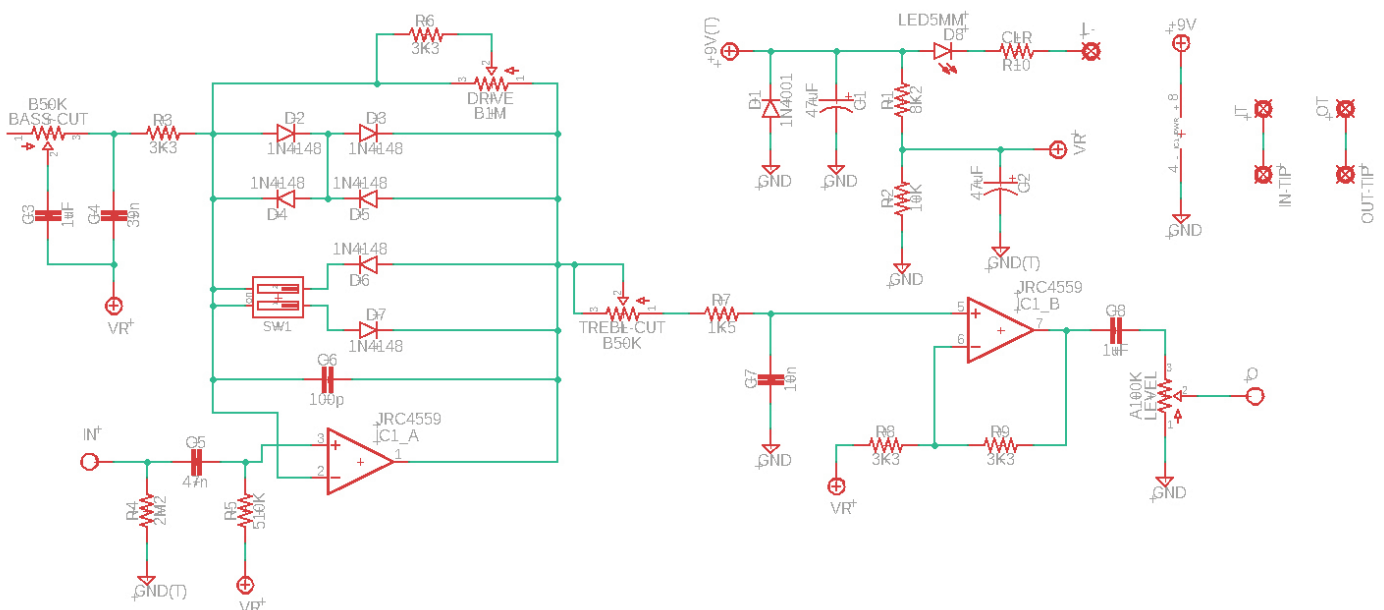
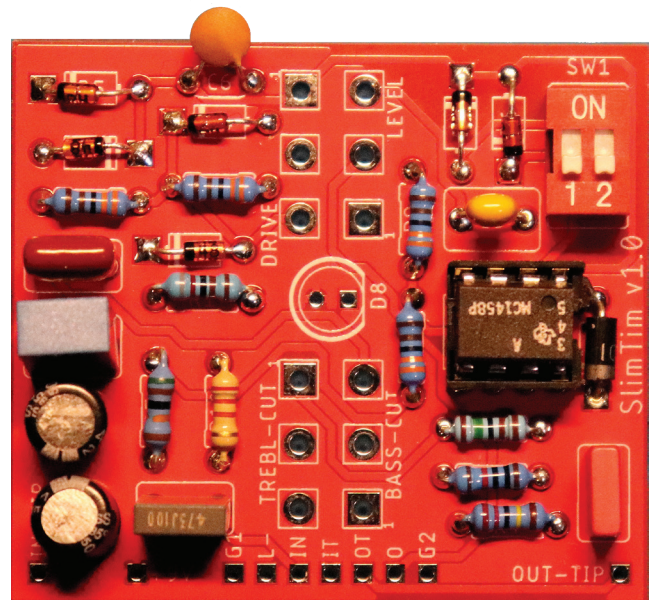
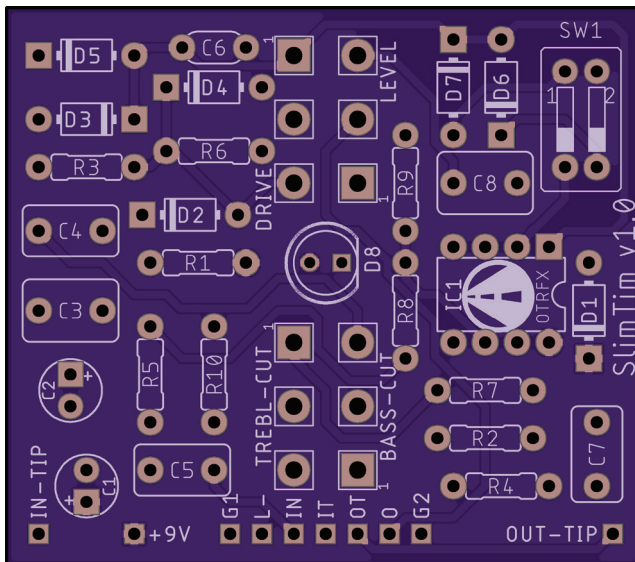




SlimTim (v1.0) Build Guide



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The Timmy is one of the kings of transparent overdrive, beautifully covering low to medium-gain overdrive sounds with a lovely cut-only EQ system: a low cut placed before the clipping section, and a treble cut placed after. In addition, a pair of internal DIP switches allow you to change the clipping arrangement in four different ways (see below for more info).

BUILD NOTES:

The IC:

The **JRC4559D** and the **LM1458N** will work wonders in this pedal, however you can try other dual op-amps such as **NJM4559D**, **JRC4558**, **MC1458P**, **TLC2272** or similar. Be sure to socket those ICs so that you can experiment!

The Pot Arrangement:

The PCB-mounted pots are tight in this 1590B-sized layout, so you may have to slightly pinch them closer toward each other, or drill the holes a bit wider for an easier fit.

Clipping Section:

From Paul Cochrane, designer of the Timmy:

"The dip switches change the clipper circuit. With both down you're at the least compressed symmetrical setting. That just means that both sides of the signal wave get clipped the same amount. When the switches are up (on) it compresses more with more distortion, but still a symmetrical clipping. You'll notice a reduction in volume because the signal gets clipped sooner. With one switch up, and one switch down you're clipping one side of the wave harder than the other - asymmetrical. That's a setting that a TIM pedal doesn't have. You won't hear a difference between which switch you have up or down when using the pedal by itself, but if you stack it with another pedal you might.

This is a little tricky to explain, but some pedals have asymmetrical clipping going on. The top part of the wave will be clipped harder than the bottom. Or another pedal might do the opposite - clip the bottom hard, and soft clip the top. The dip switches in Timmy let you pick which side you hard clip, so it might make it sit better with another pedal if you have Timmy hard clip the top, while the other pedal hard clips the bottom. That's sort of what goes on in a tube preamp with several gain stages."



Regular Mode



Asymmetrical Clipping Mode 1



Asymmetrical Clipping Mode 2



Compressed Mode

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Resistors

R1	8K2
R2	10K
R3	3K3
R4	2M2
R5	510K
R6	3K3
R7	1K5
R8	3K3
R9	3K3
R10	CLR*

Diodes

D1	1N4001
D2	1N4148
D3	1N4148
D4	1N4148
D5	1N4148
D6	1N4148
D7	1N4148
D8	LED

Capacitors

C1	47uF	Polarized Electro
C2	47uF	Polarized Electro
C3	1uF	Film
C4	39n	Film
C5	47n	Film
C6	100p	Film/Ceramic
C7	10n	Film
C8	1uF	Film

Potentiometers

BASS-CUT	B50K
TREBL-CUT	B50K
LEVEL	A100K
DRIVE	B1M

Switches

SW1	2-Position DIP Switch
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ICs

IC1	JRC4559D**
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* CLR = Current Limiting Resistor for the LED. 1k - 4.7k depending on desired brightness. (lower resistor value = brighter)

** Lots of good dual op-amp substitutions here - try NJM4559D, JRC4558, LM1458N, MC1458P, TLC2272, etc. Be sure to socket those ICs so that you can try them all!

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GENERAL INSTRUCTION STEPS:

Important: do the assembly in the following order to avoid unnecessary hardship!

1. Install/solder all resistors & diodes that lay flat on the PCB.
2. Install/solder any sockets (for ICs, diodes, resistors.. anywhere you might want to change a part, value or type).
3. Install/solder any DIP switches (if any).
4. Install/solder all capacitors & transistors.
5. Install/solder ribbon cable connector and/or any other wiring on the PCB which go to the jacks/stomp switch.
6. Install/solder PCB mounted pots & LED.
(**Important:** use pot dust caps or some other non-conductive material to keep back of pots from touching the back of the pcb)
7. Attach/solder wiring to the jacks & stomp switch.



TIPS:

- Check to make sure your wiring is complete before firing up the pedal for the first time, especially the 9V & ground wiring.
- Snip your component leads short after soldering. Your solder joints should look like shiny little Hershey's Kisses when finished.
- Socket anything you might want to change, or anything that would be very difficult to remove if faulty (ICs/transistors).

RESOURCES:

Parts Ordering:

Tayda Electronics
Mouser
Love My Switches
Small Bear Electronics

Website:

taydaelectronics.com
mouser.com
lovemyswitches.com
smallbear-electronics.mybigcommerce.com

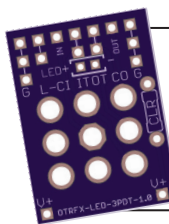
Specialties:

resistors, capacitors, diodes, sockets, LEDs, pots, knobs
resistors, capacitors, ICs
switches, knobs, enclosures, pre-wired LEDs
hardware, knobs, rare and vintage diodes, transistors & ICs



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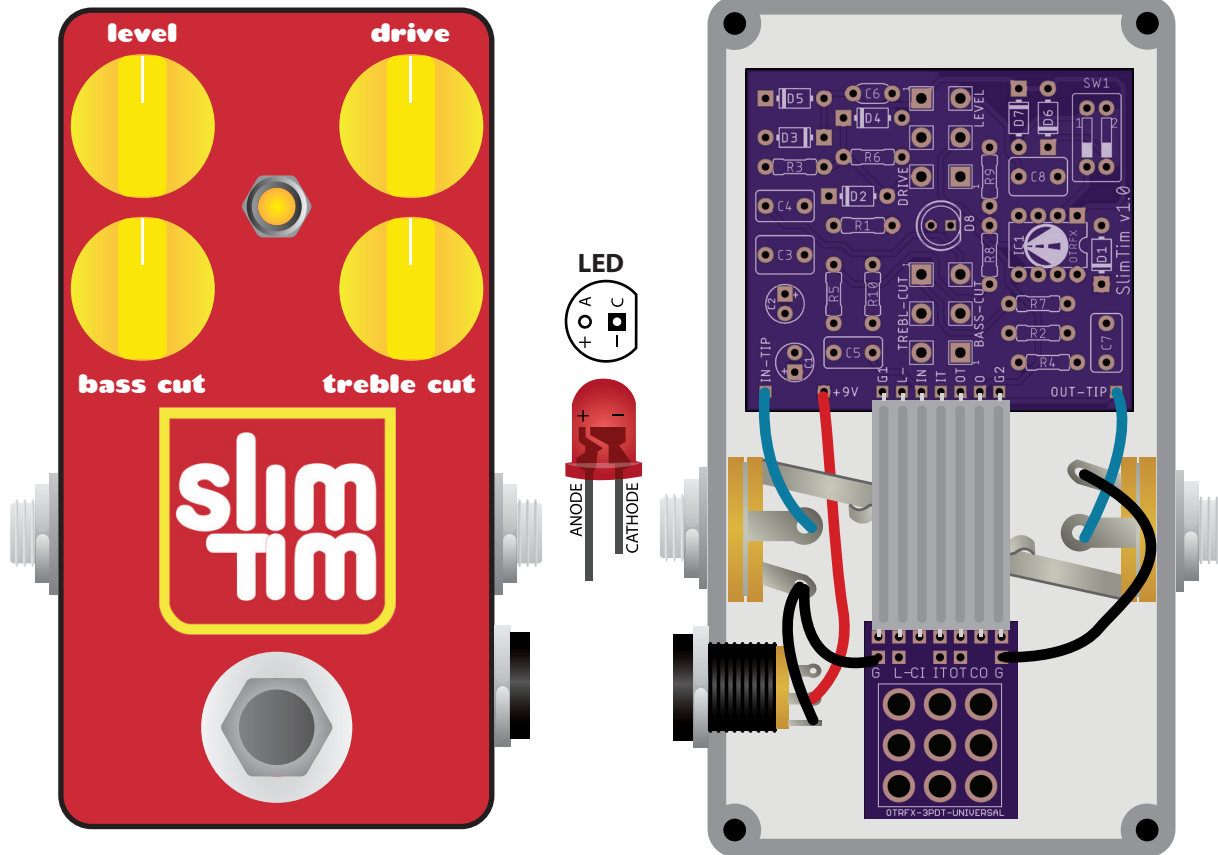


HATE WIRING STOMPSWITCHES?

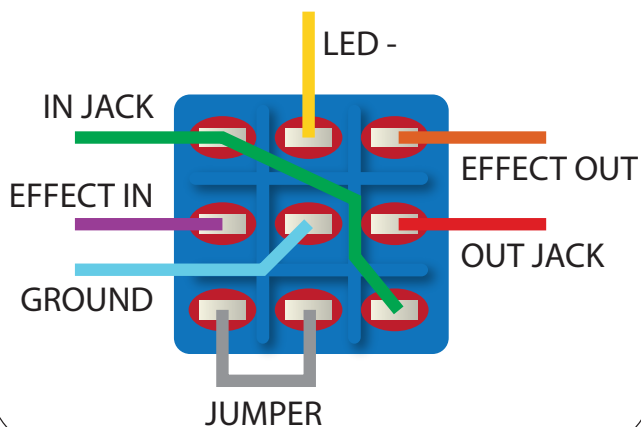
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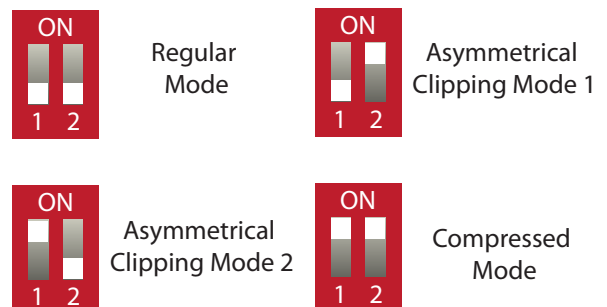
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True Bypass Wiring



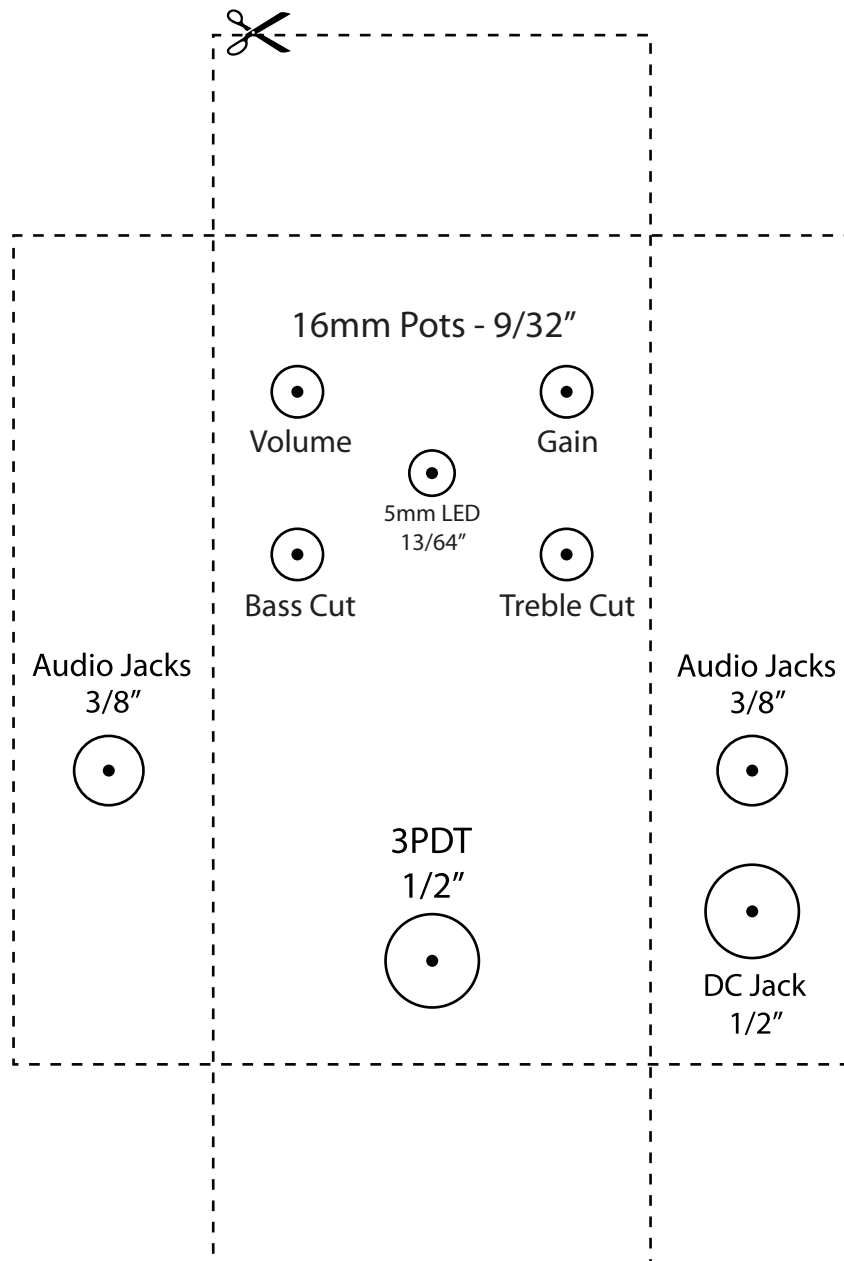
Clipping Switches



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Drilling Template

1590B Enclosure



Print at 100% and tape to enclosure for drilling