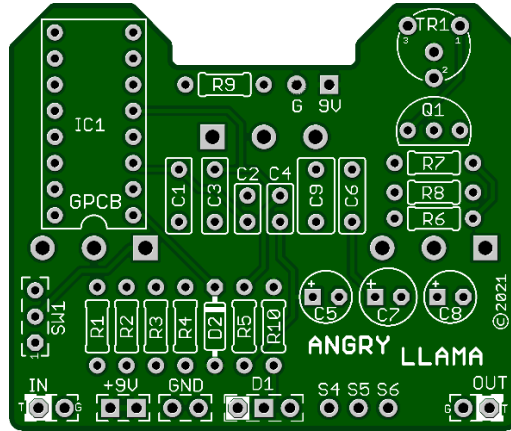


Angry Llama v2 2021

Based on one of the most popular DIY Builds the original Red Llama™ by Way Huge™. Our version also features an added Gain Stage for those people want more available Gain from this classic circuit. We do this without sacrificing the original tone by adding a clean stage at the end of the circuit. This will create more available distortion than was previously available, while preserving the character of the original. We have added a Hot Switch at SW1. Use these options to adjust your final ultimate tone.



Board Dimensions 1.95 x 1.64 inches

PARTS LIST

Part	Value	Part	Value	Part	Value
R1	1M	C1	68n	Q1	J113
R2	100k	C2	100p	LEVEL	A10k
R3	330k*	C3	33n	GAIN	B1M
R4	10M	C4	100p	BOOST	A100k
R5	1M	C5	10u		
R6	33k	C6	100n	D1	Status LED
R7	1M	C7	100u	D2	1n5817
R8	1k	C8	22u		
R9	33k	C9	220n	SW1	SPDT ON-ON
R10	1k8	IC1	CD4049UBE	TR1	20k

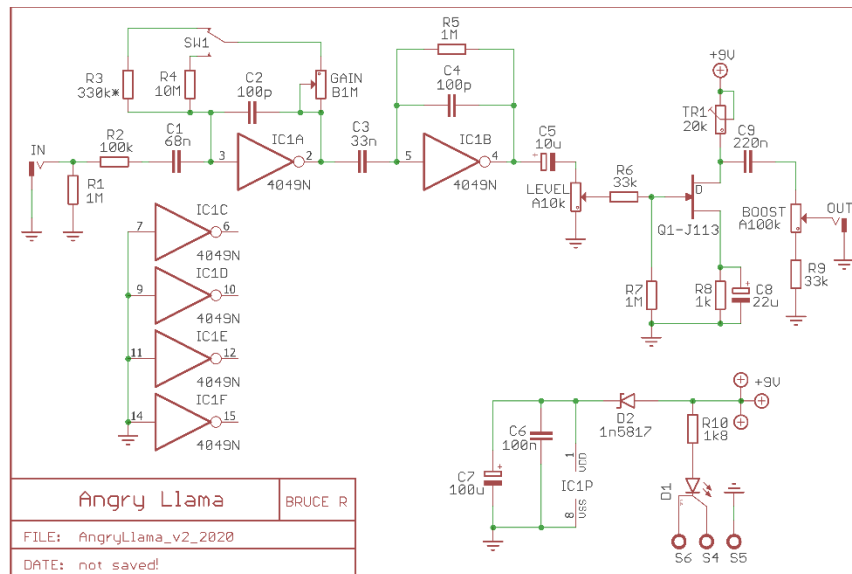
STATUS LED

*D1 is a Status LED that can use either Bi-Color Common Anode or a Standard On/Off LED.

New in this GuitarPCB 2021 version release:

- Larger off-board wiring pads.
- 1N5817 Protection Diode
- Added extra +9v and Ground pads for “Combo Builds” allowing easy wiring options and connectivity.

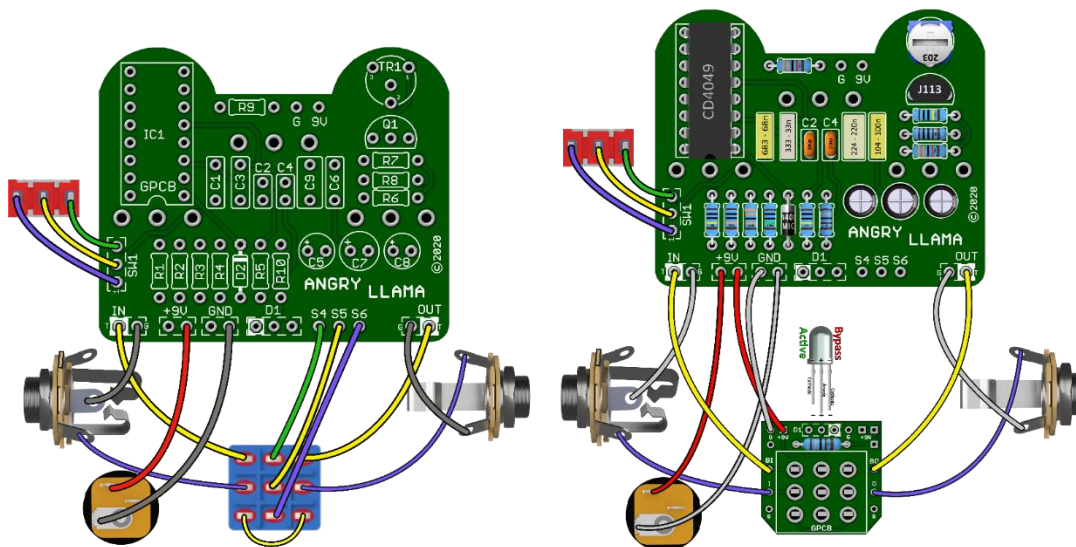
SCHEMATIC



Build Notes:

- ***R3/SW1 (Hot Switch)** R3 can be anything between 100k and 1M, although a range of 270k to 330k is suggested. This affects the level of gain in one position of SW1. The lower you go, the more difference there will be between the 2 settings of the switch. Socket and try different values.
- **TR1** adjusts the bias of the Boost portion of the circuit. To set the bias, measure the voltage between the drain leg of Q1 and any ground. Set the trimmer so that this voltage is roughly 5v to 6.0V.
- **BOOST Control:** The Boost is Off at full CCW then you can turn it up for extra Gain/Distortion.

Wiring Diagram:

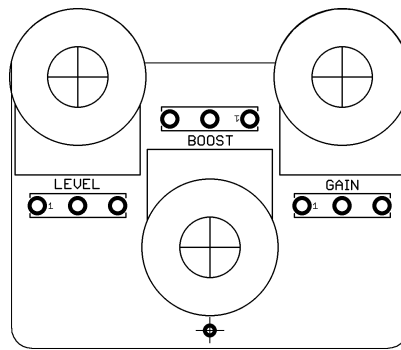


STATUS LED

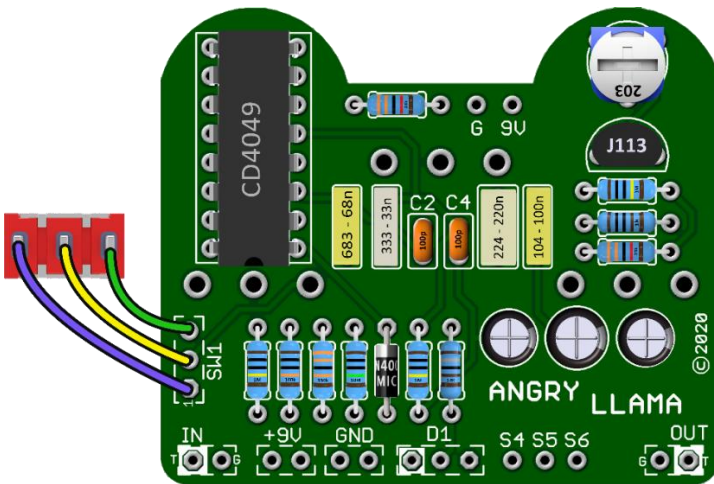
Note: If you are using our 3PDT board, you should omit wires and parts from S4, S5 & S6, D1 and R10 (CLR).

The CLR and LED will be populated on the 3PDT board instead.

Drilling Template



Drill Tips: Measure your components before selecting a drill bit. We recommend drilling the pot holes, mounting the pots in the enclosure, and then soldering the pots to the board. This approach should resolve the issue of the pots not fitting through the holes after soldering. We also recommend you make the holes for the pots a little larger than the threads in case you decide to remove the board and put it back in during the build, to avoid problems. Use this guide at your own risk. Make sure page scaling is turned off when you print this PDF, or the image above may be smaller than expected. Verify everything before drilling.



COLOR	1st Band	2nd Band	3rd Band	Multiplier	Tolerance
BLACK	0	0	0	1Ω	
BROWN	1	1	1	10Ω	±1%
RED	2	2	2	100Ω	±2%
ORANGE	3	3	3	1KΩ	
YELLOW	4	4	4	10KΩ	
GREEN	5	5	5	100KΩ	±0.5%
BLUE	6	6	6	1MΩ	±0.25%
VIOLET	7	7	7	10MΩ	±0.10%
GREY	8	8	8	100MΩ	±0.05%
WHITE	9	9	9	1GΩ	
GOLD				0.1Ω	±5%
SILVER				0.01Ω	±10%

Band 1	Band 2	Band 3	Multiplier	Tolerance
4	7	0	x 1kΩ	1%

For more build guides and tutorials please visit the [Guides Page](#) at GuitarPCB.com

For specific build support please visit our dedicated [Support Forum](#)

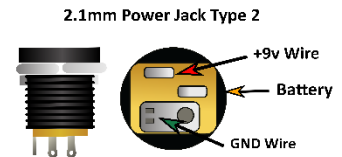
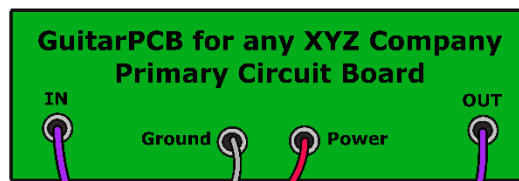
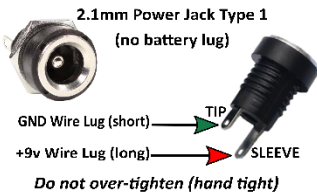
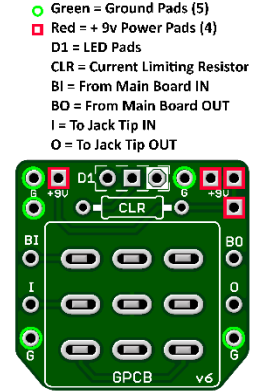
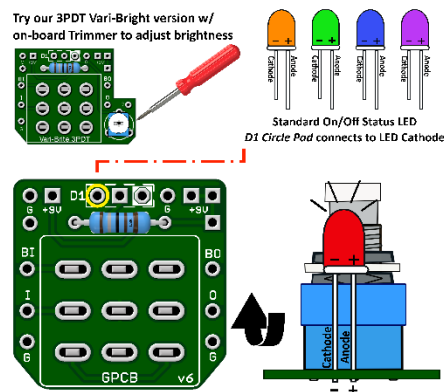
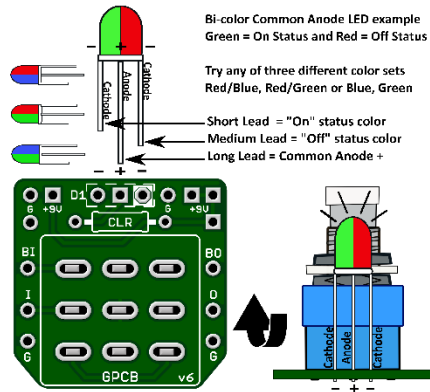
[Soldering Tutorial on YouTube](#)

Need Kits - Check out our authorized worldwide distributors:

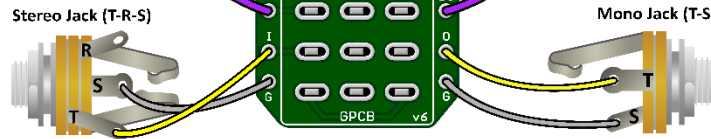
- USA – Check out [PedalPartsAndKits](#) for all your GuitarPCB kit needs in the USA.
- Europe – [Das Musikding](#) Order either boards or kits direct from Europe.
- [PedalPartsAustralia](#) - Order either boards or kits direct from Australia



GuitarPCB Tip Sheet

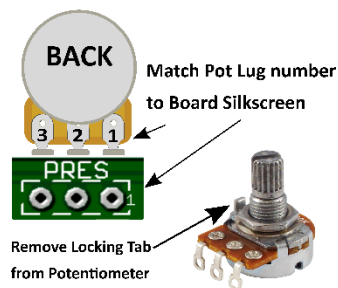


T = Tip
R = Ring
S = Sleeve

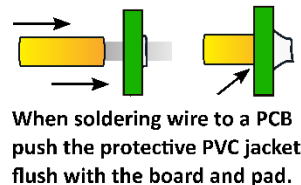
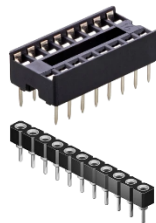


T = Tip
S = Sleeve

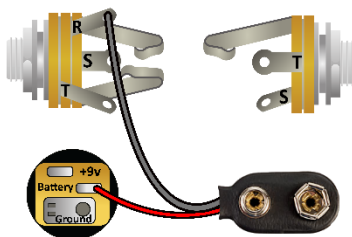
Multiple +9v and Ground Pads are convenient hookup points for additional circuits within the same enclosure. This also allows for diverse wiring schemes to suit individual needs.



Sockets make troubleshooting easier



Main Board IN/OUT Pads



Input/Output Jack Wiring

T = Tip | R = Ring | S = Sleeve

A Stereo Jack is only needed if using a Battery. Otherwise use a Mono Jack
Battery Strap RED wire is connected to Power Jack
Battery Strap Black wire is connected to RING (stereo jack)
If wiring an LED to our 3PDT Wiring Board then S4, S5 & S6 are not needed



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