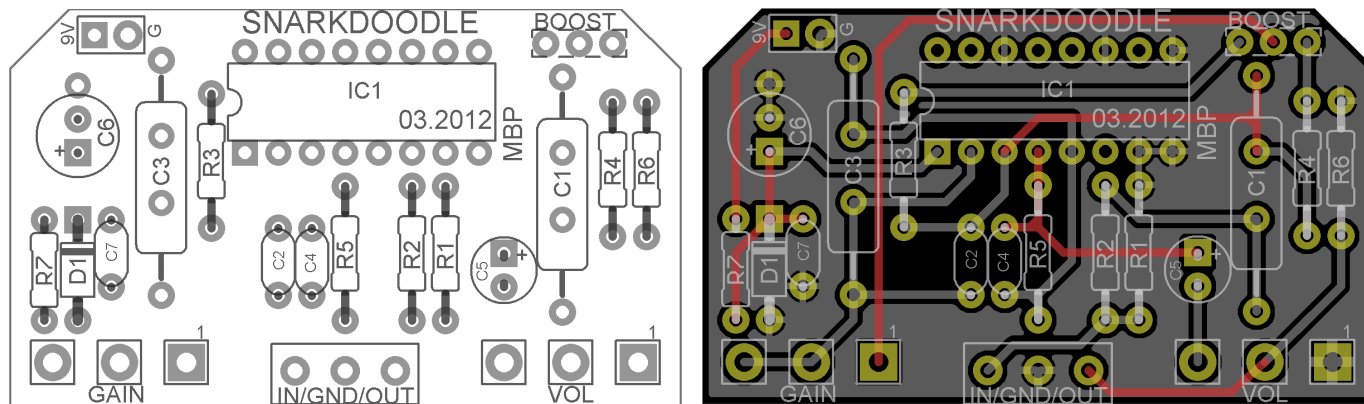


SNARKDOODLE - 2012 ED.

FX Type: Overdrive
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2" W x 1.175" H



[Download previous version of the Snarkdoodle \(before 03.2012\)](#)

Red Llama Resistors

R1	1M
R2	100k
R3	100k
R4	omit
R5	1M
R6	1M
R7	1k

Caps

C1	68n
C2	51pf
C3	33n
C4	100pF
C5	10uF
C6	100uF
C7	100n

Diodes

D1	1N4004
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IC

IC1	CD4049UBE
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Switch

BOOST	omit
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Pots

GAIN	1MB
VOL	10kA

Tube Sound Fuzz Resistors

R1	omit
R2	100k
R3	100k
R4	10M
R5	1M
R6	1M
R7	100R

Caps

C1	100n
C2	10pF
C3	50n
C4	10pF
C5	10uF
C6	100uF
C7	100n

Diodes

D1	1N4004
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IC

IC1	CD4049UBE
-----	-----------

Switch

BOOST	SPDT
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Pots

GAIN	1MB
VOL	10kA

The Craig Anderton Tube Sound Fuzz is a classic DIY project that has been built, modified and abused for years. It was popularized commercially with the Way Huge® Red Llama™ (with minor tweaks to the original design). The effect is based off a CMOS Hex inverter to generate thick and meaty fuzz. But, this is no one-trick pony. There are a variety of more subtle overdrive tones to be found with the gain pot turned down. The TSF/Red Llama can also be a fairly low gain overdrive or boost with the Gain $\frac{1}{4}$ up and the volume knob at over $\frac{1}{2}$. The tone of the effect is a moderate mid-range cut and a certain amount of depth (dimensionality) added to the guitar signal. It is a terrific project, and one that every DIY enthusiast should build!

This version of the **Snarkdoodle** allows you to build the Tube Sound Fuzz or the Red Llama. Please refer to the BOM to see what values are changed between the two versions. Note that the Red Llama does not use the **Boost** switch.

GAIN: The overall fuzz level.

VOL: The total output.

BOOST: This switch lets you toggle between two different gain levels.

Notes:

You must use the 4049UBE for this project.

You can use a 1N4001 in place of the 1N4004 for **D1**.

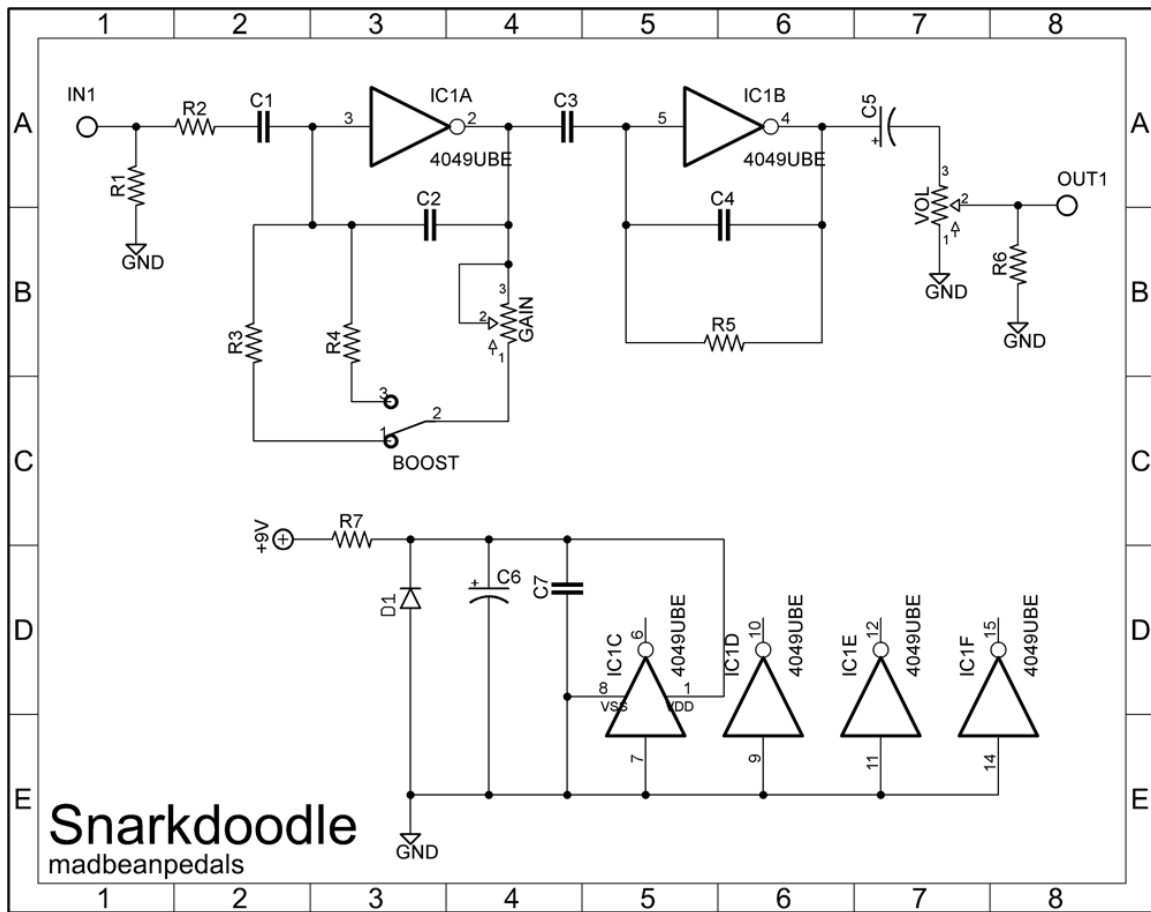
You can use either axial or radial film caps for **C1** and **C3**. The radial spacing is 5mm which suits box-style caps and the Panasonic ECQ-V/B series. The axial spacing is about 19mm and should be able to accommodate a variety of caps.

C6 is listed as 100uF in the BOM. Red Llama enthusiasts will note that this cap was 330uF in the original Way Huge version. While you can use this value, it has no impact on the tone of the pedal. 100uF will just as easily suffice and is much smaller. If you do use the 330uF, note that there is one extra ground pad just above **C6** to allow for the longer radial lead spacing.

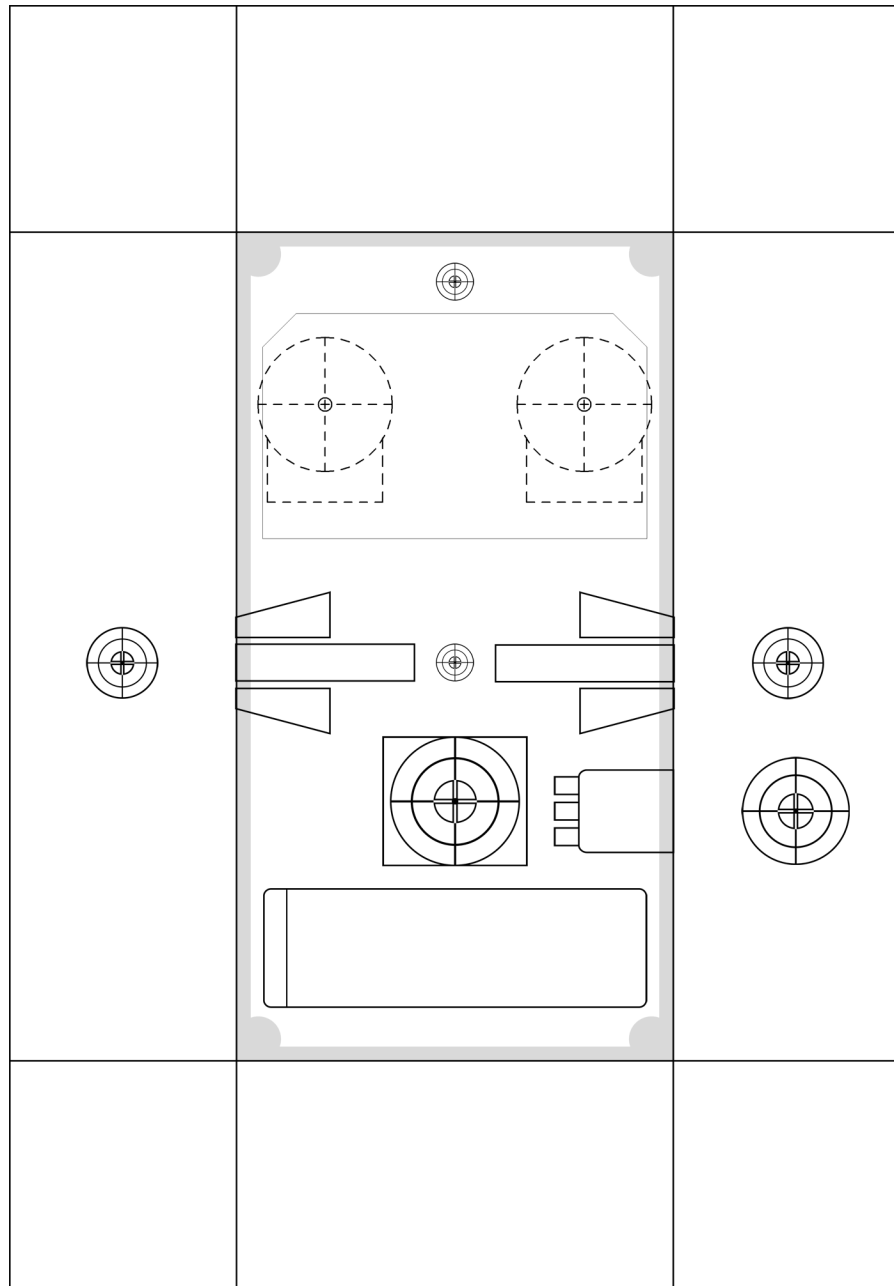
R1 has been added to this version of the Snarkdoodle. The original Red Llama had a 1M pulldown at the output only. The reissue of the Red Llama appears to have added an additional 1M pulldown at the input of the circuit, as well.

You can find out more about changes in the reissue of the Red Llama here:

<http://www.freestompboxes.org/viewtopic.php?f=7&t=16637>

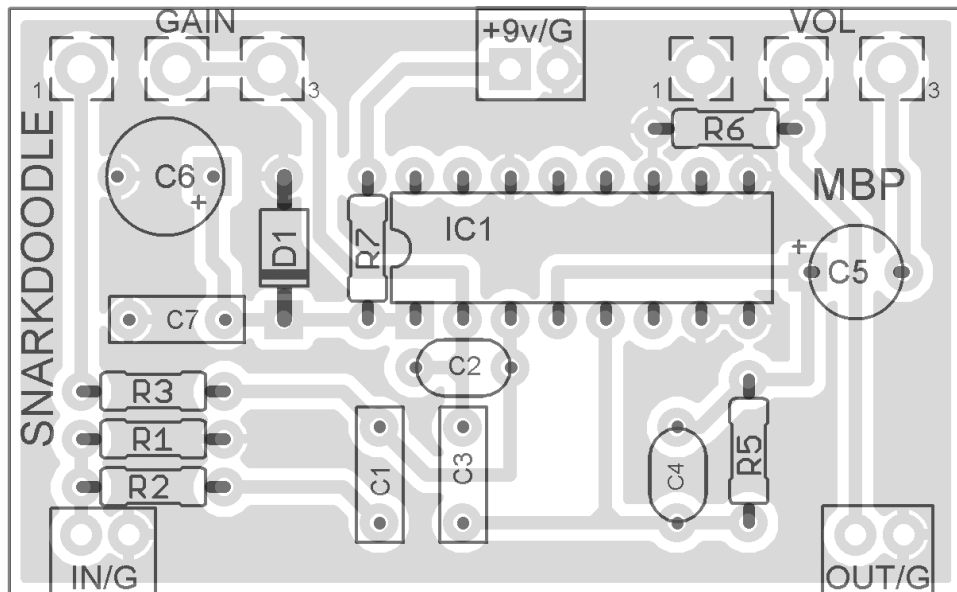


1590B Drill Template
4.64"W x 6.69"H



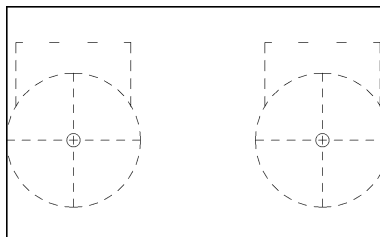
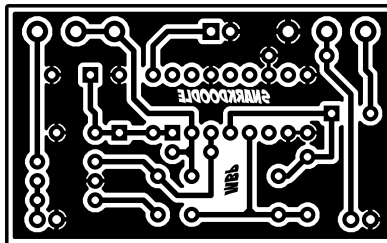
This template is approximate. Please check carefully before committing to drill.

PCB Artwork for etching



This version does not include R4 and the Boost switch.

2.04" W x 1.26" H (including borders)



Licensing

PCBs purchased from madbeanpedals (or etched from the artwork provided) for the **Snarkdoodle** are intended for DIY / non-commercial use only. If you are a commercial pedal builder or "work for hire", please do not use madbeanpedals materials for your product offerings. Similarly, madbeanpedals PCBs are prohibited from commercial re-distribution including "kits".

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