

SLOW LORIS

FX TYPE: DISTORTION

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Update: 03.2012 See Notes

The **Slow Loris** is a Proco® Rat™ with a steroid injection. The newest layout offers PCB mounted pots and switch, diode selection, and the inclusion of the “Sweep” control (popularly known as the ‘Ruetz’ mod).

The **Slow Loris** will add a distinct voice in your distortion arsenal and with the inclusion of the mods it really comes alive!

Controls

GAIN: Sets the overall distortion amount.

CUT: This reduces the treble content as you turn the control clockwise.

VOL: Output volume.

SWEEP: At fully clockwise, it gives you the traditional Rat tone. As you turn the control up, the clipping frequency goes lower and the overall distortion reduces into more of an overdrive territory.

SW: Lets you choose between different clipping diodes (stock/none/LED).

Notes

This layout allows you to use 16mm PCB mounted pots and a solder lug ON/Off/On SPDT mounted directly to the PCB.

You can use either 3mm or 5mm LEDs for **D1** and **D2**. Red diffused is suggested, but you can experiment with high brightness and/or other colors for small tonal changes.

Note that **C9** is a box-type film capacitor (1uF).

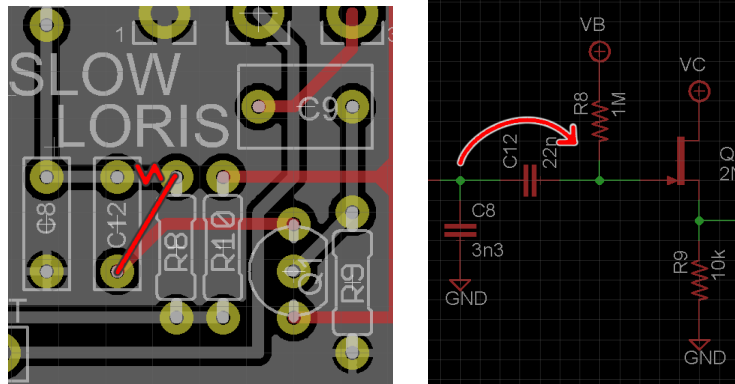
03.28.2012:

A mistake has been found on the schematic. R8 on the existing schematics (before 03.28.2012) is shown in the wrong location. It should be tied directly to the gate of Q1. Please see the the pics below which show the correct position of R8 on the schematic and the correct location to tie R8 off on the Slow Loris PCB so that it is tied directly to the transistor.

The good news is that if you have already built the Slow Loris, you do not need to change anything. I tested this out thoroughly a few days ago, and there is no detectable alteration in tone. I tested with R8 in both locations at all gain and tone settings as well as with the guitar volume rolled down and there was no impact. Therefore, I suggest leaving it as is if you have already completed your build. If you want to change it anyway, the pic below shows where to tie off R8. You can do this by cutting the trace on the bottom side of the board between R8 and C12, and then running a jumper to the other side of C12.

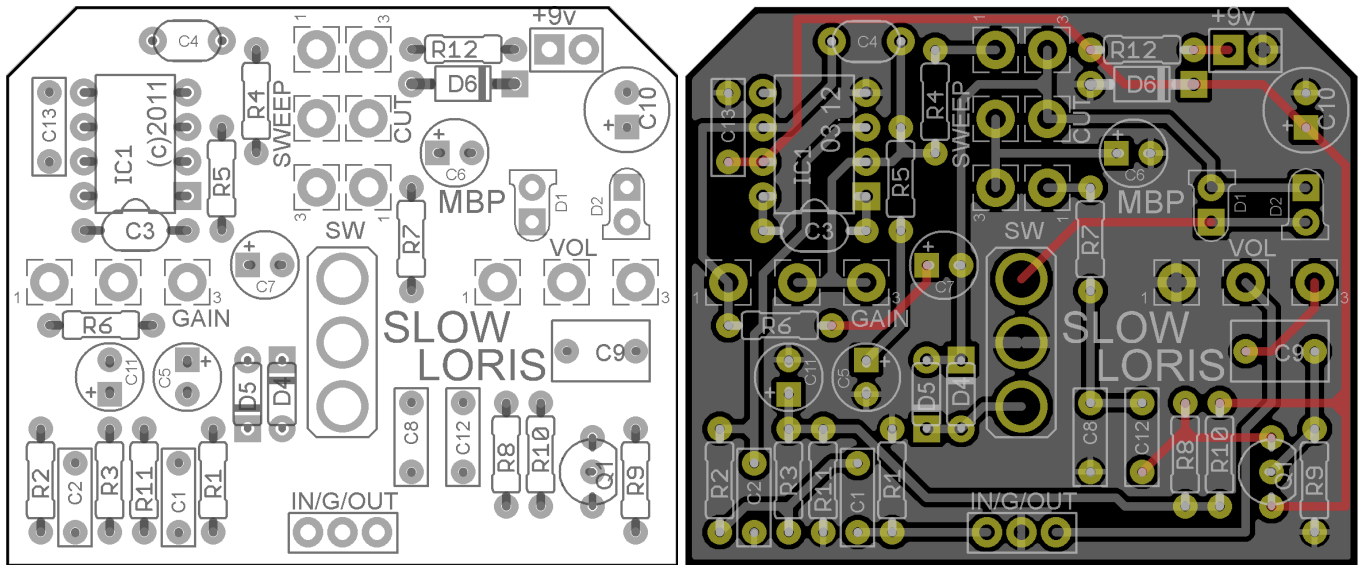
This mistake has been corrected on the newest batch being released at the beginning of April 2012. They will be identified by 03.12 on the silkscreen layer at 1C1 to indicate when the correction was made.

Thanks to oldhousescott who pointed out the error!



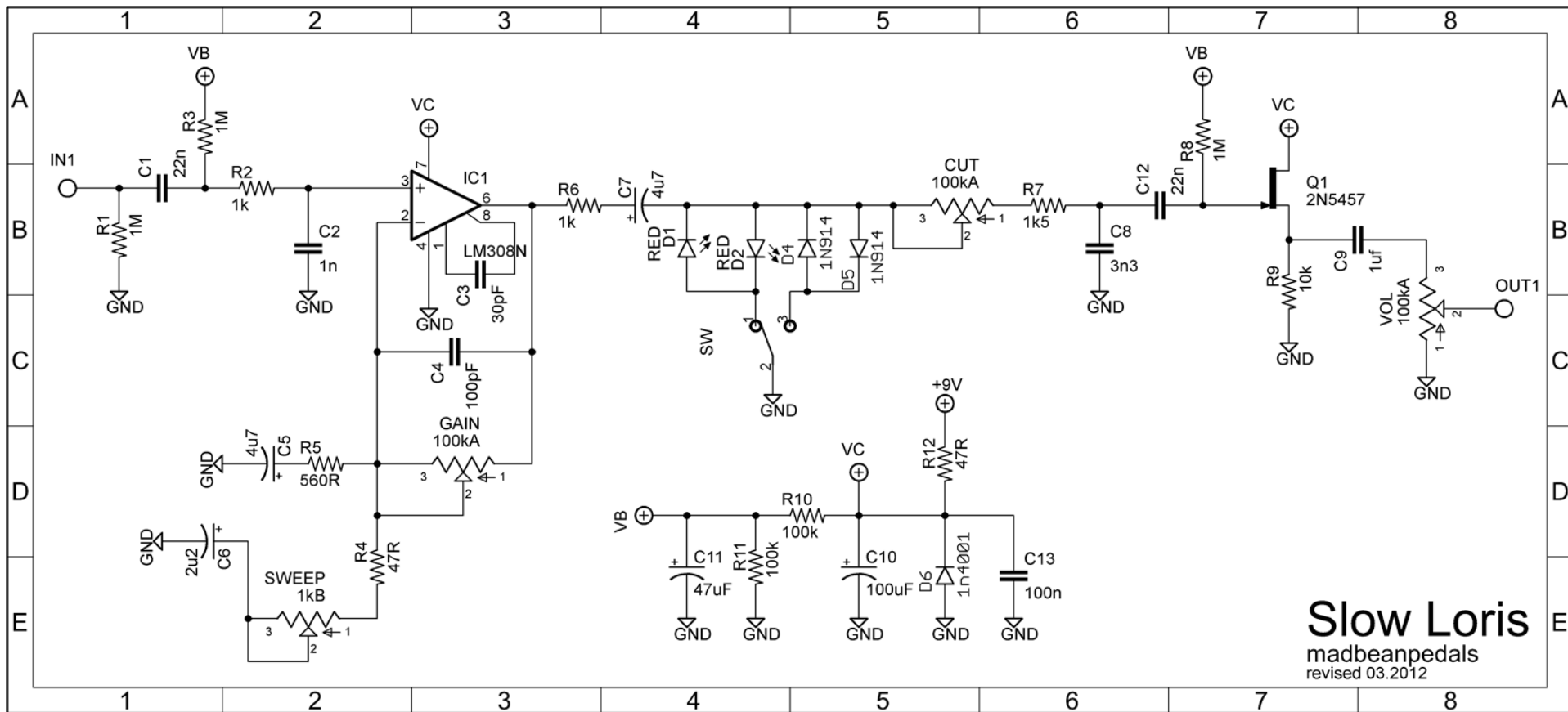
Layout Diagram (corrected 03.28.12)

1.95"W x 1.625"H



Bill of Materials

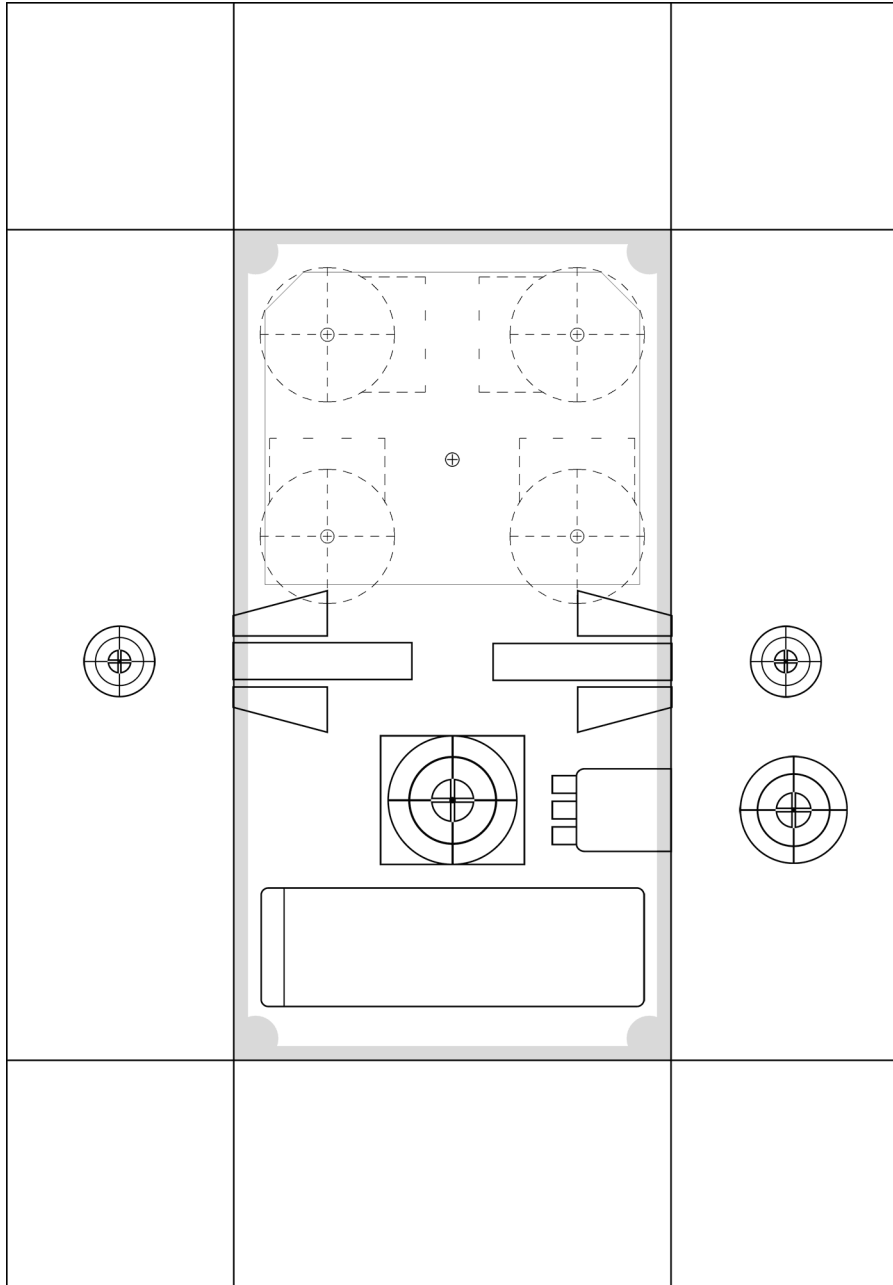
Resistors		Caps		Diodes	
R1	1M	C1	22n	D1, D2	RED LED
R2	1k	C2	1n	D4, D5	1N914
R3	1M	C3	30pF	D6	1N4001
R4	47R	C4	100pF	Transistors	
R5	560R	C5	4u7	Q1	2N5457
R6	1k	C6	2u2	IC	
R7	1k5	C7	4u7	IC1	LM308
R8	1M	C8	3n3	Switch	
R9	10k	C9	1uf	SW	SPDT
R10	100k	C10	100uF	Pots	
R11	100k	C11	47uF	CUT	100kA
R12	47R	C12	22n	GAIN	100kA
		C13	100n	SWEEP	1kA
				VOL	100kA



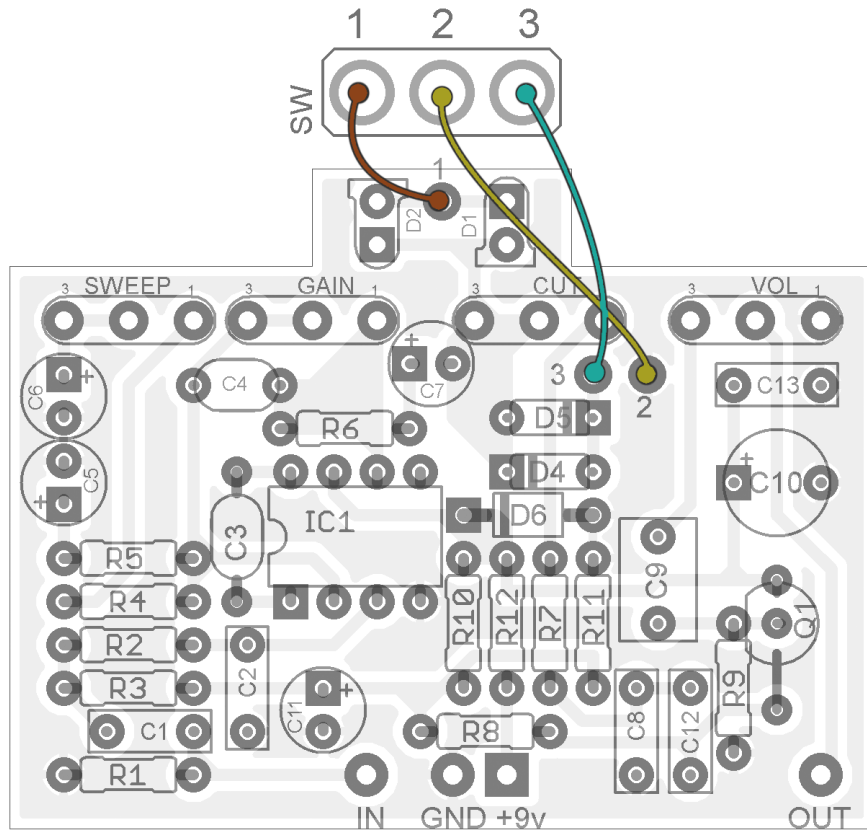
Slow Loris
 madbeanpedals
 revised 03.2012

(Corrected 03.28.2012)

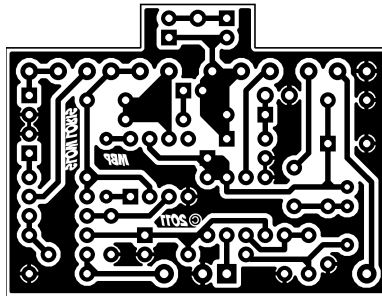
1590B
Image size – 4.64" x 6.68"



Etching Layout (corrected 03.28.2012)



2.00" x 1.53"



ON PREVIOUS VERSION: CONNECT R8 TO C12 AS INDICATED BY THE RED CIRCLE.

