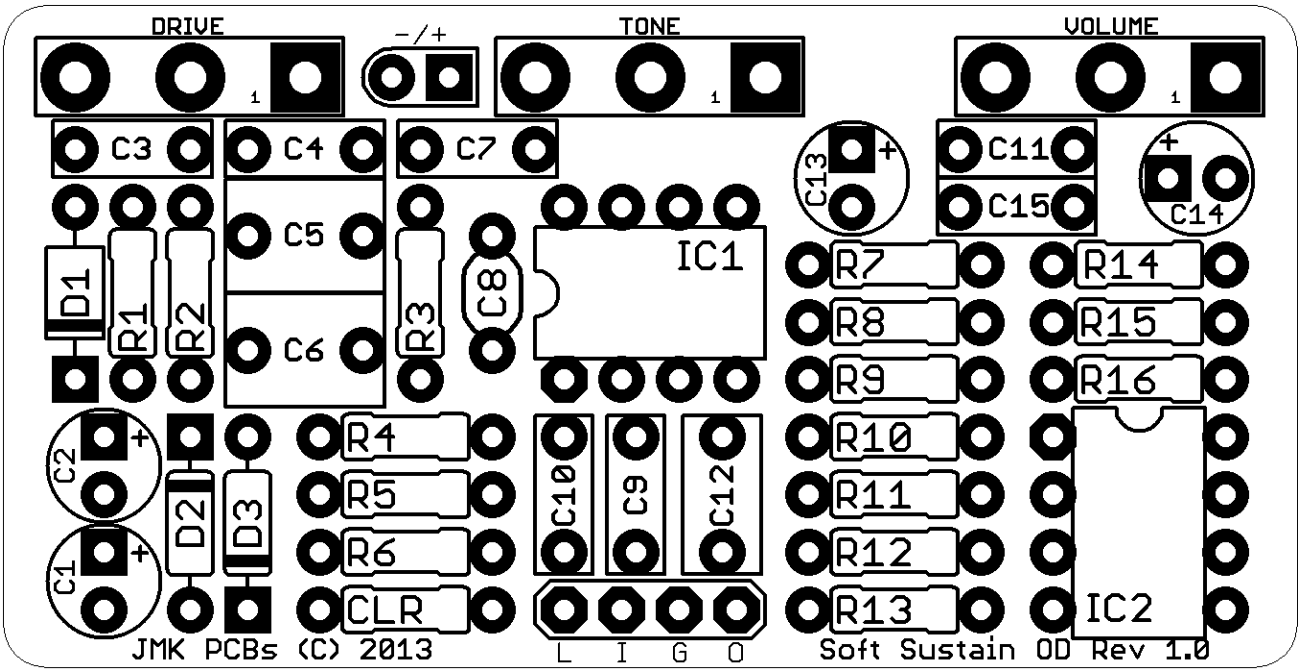
JMK PCBS PRESENTS...

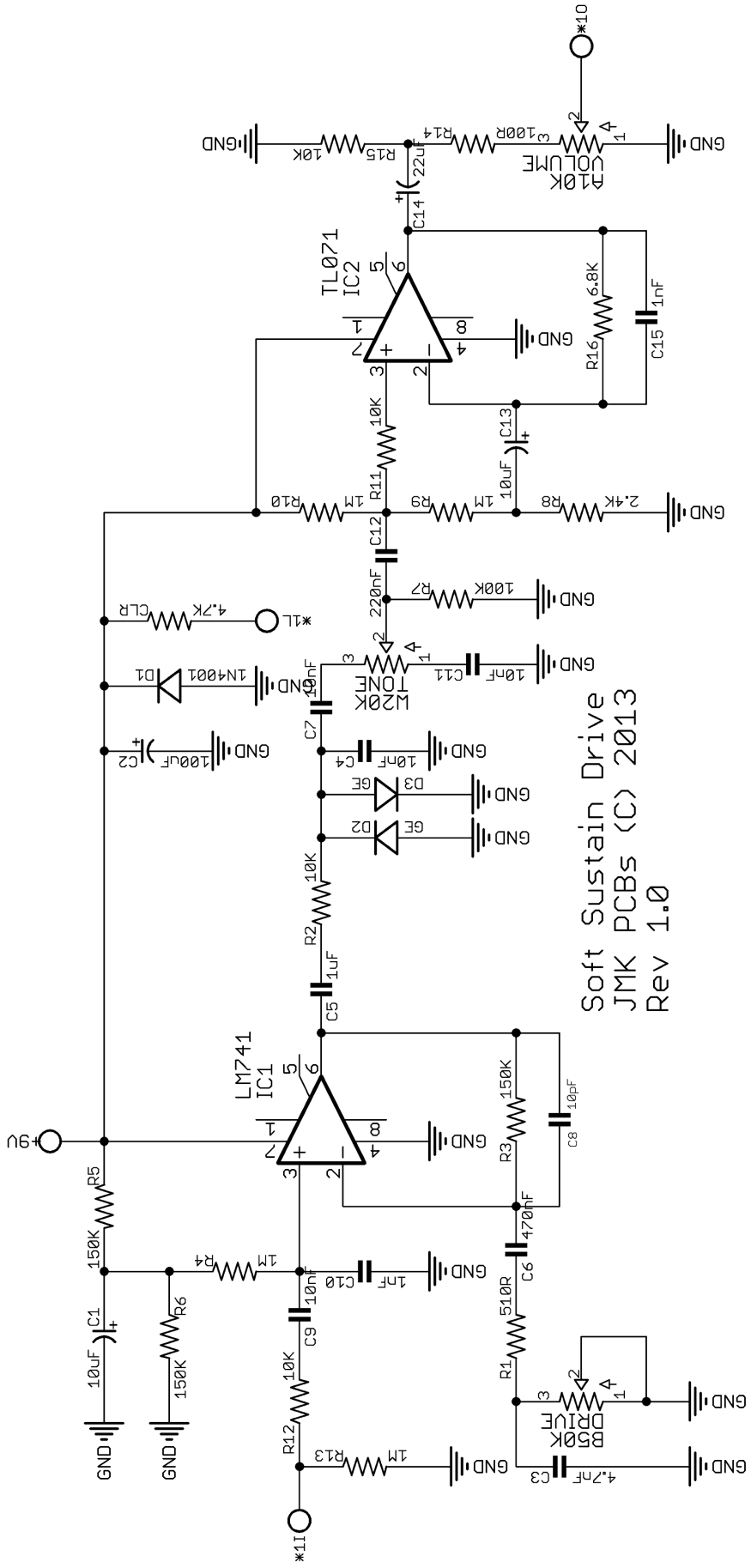
SOFT SUSTAIN DRIVE

PCB AND SCHEMATIC ARTWORK (C) 2014 JMK PEDALS

VERSION 1.0.1: 03/10/2014



Resistors				Capactitors				Semiconductors	
R1	510R	R10	1M	C1	10uF	C9	10nF	IC1	LM741
R2	10K	R11	10K	C2	100uF	C10	1nF	IC2	TL071
R3	150K	R12	10K	C3	4.7nF	C11	10nF	Diodes	
R4	1M	R13	1M	C4	10nF	C12	220nF	D1	1N4001
R5	150K	R14	100R	C5	1uF	C13	10uF	D2, D3	Clipping
R6	180K	R15	10K	C6	470nF	C14	22uF	Potentiometer	
R7	100K	R16	6.8K	C7	10nF	C15	1nF	GAIN	B50K
R8	2.4K	CLR	4.7K	C8	10pF			TONE	W20K
R9	1M							LEVEL	A10K



Build Notes

• The Soft Sustain OD is a near clone of a popular european builder's overdrive circuit, the SS-2. It features a pair of single op amps, so you can mix your gain stage and makeup stage op amps, for instance, using a lower fidelity op amp in the gain stage (LM741) with a fairly clean higher fidelity op amp in the makeup stage (TL071). It also features hard clipping with a parallel capacitor after the gain stage to generate clipping.

• Lots of fun can be had with this circuit, with lots of experimentation available with the tone section, the gain section, the clipping, and makeup stages being fairly flexible. Feel free to experiment with any elements that you might want to tweak!

• Hooking up the PCB is pretty simple, but to clarify: L = the connection for the + end of an LED; I = PCB Input; G = Ground for the Switch; O = PCB Output; + = 9V input; - = Ground for DC Jack; GND = Extra Ground for 1/4" Jack

• The ICs used in this project are very influential on the tone and character of the drive. Keep in mind that the pinout of the IC needs to be considered when installing, but otherwise, every single op amp IC you can think of is an option here.. **We highly recommend socketing your IC!** Options to try include, but is not limited to: LM741, LM 351, CA3140/30, TL061, TL071, NE5534 and LM386.

True Bypass Wiring Diagram