JMK PCBS PRESENTS ...

BIG BASS DRIVE

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Resistors					Capactitors				Semiconductors		
R1	1M	R11	47K	R21	2K	C1	47nF	C11	220nF	Q1, Q2	2N5457
R2	1M	R12	47K	R22	15K	C2	47nF	C12	100uF	IC1	CA3130
R3	15K	R13	1M	CLR	4.7K	C3	470pF	C13	100uF	Dic	odes
R4	10M	R14	10M			C4	47pF	C14	22nF	D1, D2	Green LEDs
R5	15K	R15	2.6K			C5	1uF	C15	47nF	D3, D4	1N4007
R6	30K	R16	5.6K			C6	4.7uF	C16	22nF	D5	1N4001
R7	10K	R17	1.5K			C7	10uF	C17	4.7nF	Potent	iometer
R8	1K	R18	10K			C8	220nF			GAIN	A1M
R9	15K	R19	27K			C9	100pF			TONE	A50K
R10	360K	R20	1K			C10	1uF			LEVEL	B50K

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BUILD NOTES

• The Big Bass Drive is a clone of a modern bass overdrive. It shows many similarities to other designs from the same maker, but it essentially uses a pair of Jfet gain stages as input and output buffers while creating a drive and tone control section based around a single op amp. This makes for a pretty awesome tone, but a high parts count.

• Missing from this build, as compared to many Bass Drives, is a 'blend' circuit which is very handy for overdrives for Bass. If you really value a blend of clean and dirt for you Bass signal, consider boxing the Big Bass Drive along with the Panner PCB, also available from JMK PCBs. These two circuits together will allow you to go from true dry only to true wet only, with a myriad of options between.

• 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

• It should be noted that there are several odd parts in the BOM for this project. Below are some common substitutes for these parts. You can find precise parts if you would like, but in most cases the common values are going to give the same tonal response.

Part Number	Original Value	Common Substitute
R6	31.6K	30K, 33K
IC1	CA3130	TL071

• The original transistors for this design were BF244a, which are both difficult to come by from typical DIY suppliers, and also unnecessary to be found. Because these are simple gain stages, many values will do. We have set this version up to use a 2N5457 type pinout, so if you do choose to use the BF244a, please make adjustments to the transistor for the different pinout. **We highly recommend socketing your transistors!** Other options to try include, but are not limited to: 2N5952, 2N5458, and J201

• Similar to the transistors, the IC used is not a common type as well, though it is more commonly found from typical DIY suppliers. Keep in mind that the pinout of the IC needs to be considered when installing. **We highly recommend socketing your IC!** Options to try include, but is not limited to: CA3140, TL061, TL071, NE5534 and LM386.

TRUE BYPASS WIRING DIAGRAM

