



Electronic Audio Experiments

Mojo Titan PCB Build Document

Introduction

The Mojo Titan is based on the infamous Sonic Titan™ by D*A*M, but on a PCB with space for high-grade “mojo” parts. It is comprised of a JFET gain stage boosting an LM386, which is a small power amp IC with excellent saturation characteristics. The Titan produces articulate, amp-like distortion with a surprising amount of versatility.

If you have any questions or comments, you may send me an email at electronicaudioexperiments@gmail.com.

Happy building!

John

Assembly Notes

- Any LM386 can be used, but the LM386-3 is recommended to reduce artifacts that occur during the decay of long notes.
- A DIP8 socket is recommended for the LM386.
- Both J201s and 2N5457s have been successfully tested in this circuit. The J201 has slightly more gain and sparkle to my ears. JFETs may work but have not been tested.
- I build my Mojo Titans in a 1590XX/1790NS enclosure, but you are welcome to use a smaller one. A 1590BBT should work with room to spare.
- Part numbers are given for “mojo” parts used in my builds. Other packages can fit and you are welcome to experiment!

Bill of Materials

Suggested Mojo Parts			
Value	Qty	Reference #	Mouser Part #
1M	1	R1	71-RN65D-F-1.0M
2.2K	1	R2	71-RN65E-F-2.2K
1K	2	R3, R4	71-RN65C-B-1.0K
4.7K*	1	Off board, for LED	71-RN65D4701F
100uF	1	C1	75-TVA1160-E3
5uF	2	C2, C3	75-TVA1303-E3
10uF	2	C5, C7	75-TVA1204-E3
4.7nF	2	C4, C6	505-FKP14700/630/5

Non-Mojo Parts		
Value	Qty	Reference
LM386	1	IC1
100KA	2	Volume, Gain
100KB	1	Tone
10K Trimpot (Try Mouser PN 72-T70YE-10K)	1	BIAS
DC Jack	1	+9V
¼" Jack	2	In/out
DIP8 Socket	1	IC1 (socket)
1590XX or 1590BB	1	Enclosure
3PDT	1	Bypass
Knobs	3	Knobs
5MM LED	1	Indicator
5MM Bezel	1	Indicator
J201 or 2N5457	1	Q1



