Acapulco Lite

Based on:
EQD's Acapulco Gold

Number of parts:
Low, total 14 components

Enclosure type:
1590b / 125b

Effect type:
Distortion

Technology:
LM386

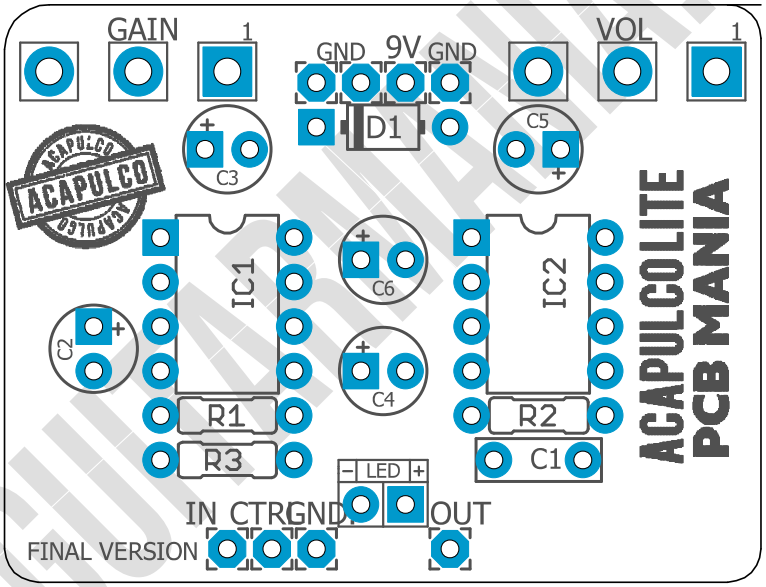
Get your board at:
Acapulco Lite

Build difficult:
Easy

Power consumption:
9V

Get your kit at:
Das Musikding (Europe)

Project overview:
The Acapulco Lite is a dirt-simple distortion Device inspired by the EQD's Acapulco Gold. It reminds the sound of the power section of a cranked vintage Sunn Model T, with its openness, clarity, and crunch.



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Introduction

Sometimes you can do a lot with less, and this super simple board is proof of that. The motto of the Acapulco Lite is *one button, one knob*. If you want more volume, just move the knob. Keep it simple, quit turning knobs, and play that guitar. Are you ready to enter the zone without any distractions?

We decided to keep the Acapulco Lite's controls as simple as possible with a super compact design to fit in a 1590B Enclosure with only a pot on board. The footswitch turns the pedal on and off, and the knob controls the output volume so you can focus on your playing. But in this final version, we added the possibility of attaching a second knob that controls the Gain; It is all up to you. The board is ready to be wired as a true bypass.

Controls

Potentiometers

- VOL
- GAIN

Bill of materials

Resistors	
Part	**Value**
R1	1m
R2	68k
R3	**2k2-4k7***

Capacitors	
Part	**Value**
C1	4n7

Electrolytic capacitors	
Part	**Value**
C2	10u
C3	10u
C4	1u
C5	1u
C6	100u

IC	
Part	**Value**
IC1	LM386
IC2	LM386

Potentiometers	
Part	**Value**
VOL	100k A
GAIN	1m C

Diodes	
Part	**Value**
D1	1n5817
LED	LED3MM

Switches	
Part	**Value**
-	3PDT Stomp foot

Jacks	
Part	**Value**
-	DC JACK
-	AUDIO JACK
-	AUDIO JACK

Shopping list

Resistors		
Qty	**Value**	**Parts**
1	1m	R1
1	68k	R2
1	**2k2-4k7***	R3

Capacitors		
Qty	**Value**	**Parts**
1	4n7	C1

Resistors		
Qty	**Value**	**Parts**
2	10u	C2, C3
2	1u	C4, C5
1	100u	C6

IC		
Qty	**Value**	**Parts**
2	LM386	IC1, IC2

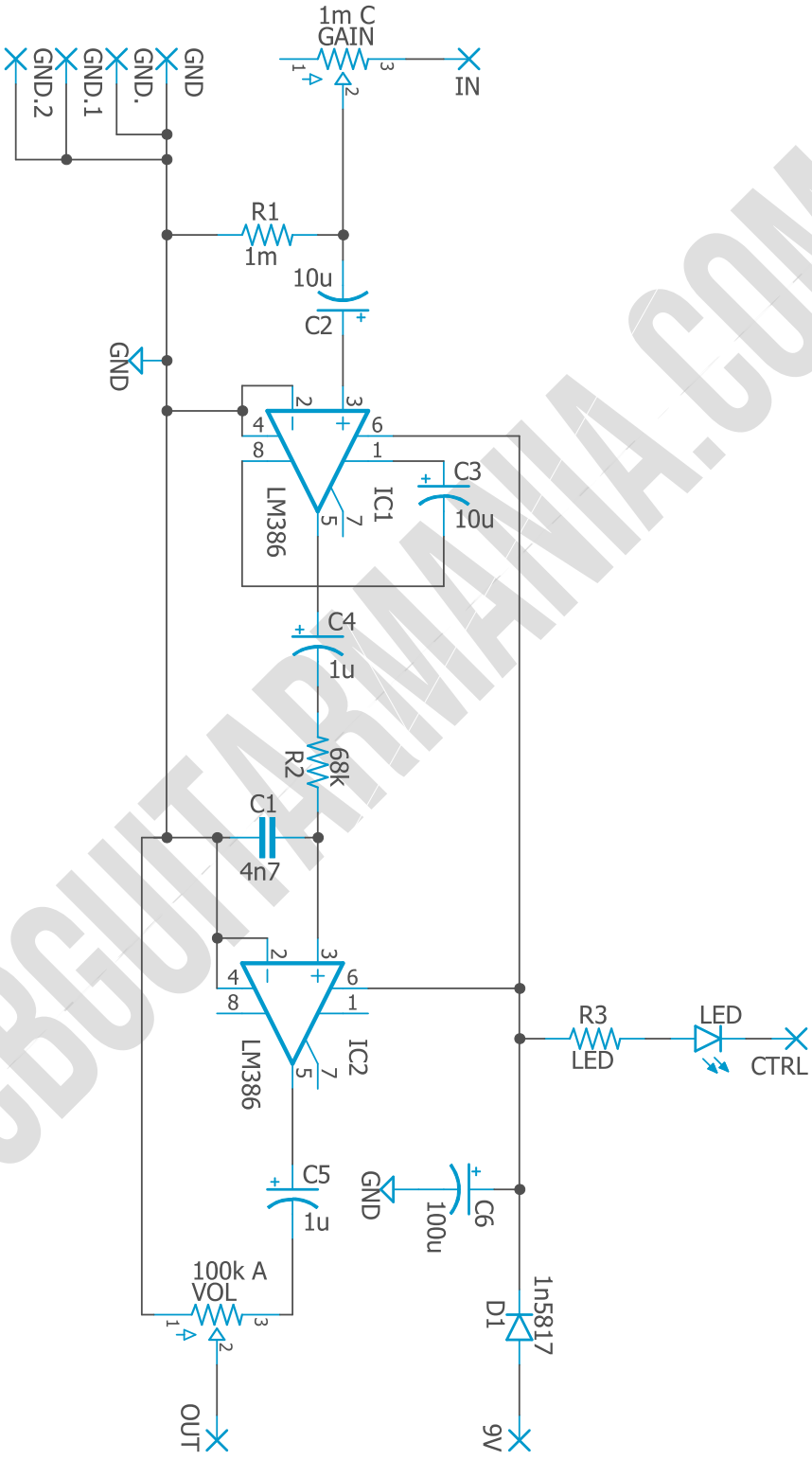
Potentiometers		
Qty	**Value**	**Parts**
1	1m C	GAIN
1	100k A	VOL

Diodes		
Qty	**Value**	**Parts**
1	1n5817	D1
1	LED3MM	LED

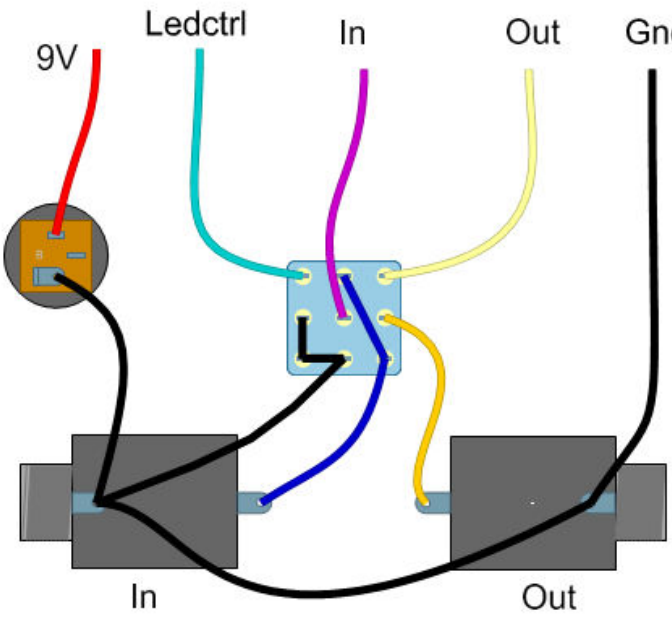
Switches		
Qty	**Value**	**Parts**
1	3PDT Stomp foot	-

Jacks		
Qty	**Value**	**Parts**
1	DC JACK	-
2	AUDIO JACK	-

Schematic



Off board wiring



Components Recommendations

As many people like to experiment with some pedals with higher voltage, always ensure your **electrolytic capacitors'** max tolerance is over 25v.

This board has been tested using Film box capacitors for most of the values over 1nf and ceramics discs for those under 1nf. However, high-quality components such as Wima's Capacitors and Panasonic's electrolytics can deliver a better performance.

All the resistors used for testing this project are 1/4W Metal Film.

The BOM and Shopping list are exclusive regarding this project. It doesn't include all the hardware like the 3PDT bypass switch, audio/dc jacks, enclosure, etc.

Build Notes

If this is one of your first projects, I recommend you to take a look at our Pedal Building Guide.

For a successful and tidy build, it's recommended the following order:

1. Resistors & diodes
2. Capacitors, starting with the smaller ones and the ceramic ones.
3. Electrolytic capacitors (always check the polarity)
4. Transistors
5. Wires
6. Potentiometers and switches
7. Off-board wiring

2k2-4k7*
The smaller the value, the brighter the LED.

Wiring Diagram

All our projects include a free 3PDT Board to make the wiring easier and tidier. Also, all of our PCBs feature the status LED on board.

The pad named "Ctrl" or "LED" is the one that controls the status of the led; wire it to the "LED" pad on the 3PDT board or in the control slug of your 3PDT.

This board has been designed to match our EZ 3PDT PCB; check it here to access our Pedal Wiring Guide.

Drill Template

This Project has been planned to fit into a 1590b or a 125b enclosure type.

Check the Attached "Drilling templates" to drill the box properly. The files are on Scale 1:1, ready to print on an A4 page.

Licensing and Usage

We really appreciate your trust and support in buying this PCB, as well as your will to dive into the DIY electronics world. For us, that's why you can make this project work properly and enjoy not only the building process but also experiment and play with it on your rig.

We try to reply to every question we receive on our email or our social media. Still, we try to encourage all our customers to join our PCB Guitar Mania – Builders Group on Facebook to post all your doubts, issues, suggestions, or requests, share your builds, and have some feedback from other fellow builders and us!

We tested all our projects following this same guide on their standard configurations. Although, not all of the variations and mods have necessarily been checked. These are suggestions based on the schematic analysis and the experiences and opinions of others. Feel free to share with us your views and recommendations regarding the mods your personal experimentation.

These boards may be used for commercial endeavors in any quantity unless expressly noted. No attribution is necessary, though accreditation or a link back is always much appreciated.

If you are a builder planning to make your own run of pedals, we also offer the service of custom-made boards with your brand and logo, design according to your specifications.

The only usage restrictions are that, first, you cannot resell the PCB as part of a kit without prior arrangement with us, and second, you cannot scratch off the silkscreen or other way of trying to hide our logos and the source of the PCBs. Like it's written above, if you want to have your designs with your brand and logo, we could undoubtedly reach an agreement.

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