

Pacifier

Based on:
ThorpyFX Peacekeeper

Effect type:
Low gain overdrive

Build difficult:
Beginner - Average

Amount of parts:
Average, total 44 components

Technology:
Op amps

Power consumption:
9V

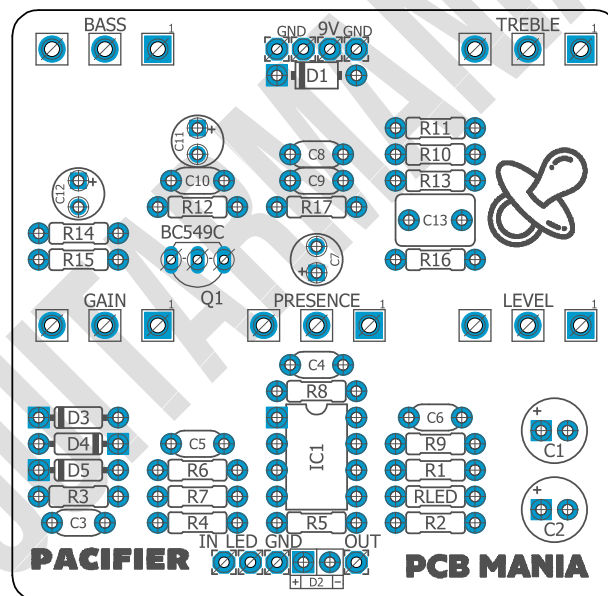
Enclosure type:
125b

Get your board at:
[Pacifier](#)

Get your kit at:
[Das Musikding \(Europe\)](#)

Project overview:

Experience the sweetest of sounds with this low gain overdrive inspired by ThorpyFX Peacekeeper. This pedal is great to boost your dirty amplifier or as a pure overdrive that sits on the edge of crunch.



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Introduction

Pacifier is a board designed to suit all guitars and all amps while delivering the sweetest on the edge of crunch tones out there. With the pre-gain set low and the volume pushed, you get some beautiful clean boosts that can push your already driven amp up. You can also use this pedal with a bit of extra pre-gain to start pushing the amplifier with a soft, almost driven sound that sounds beautiful for softer rock styles and blues.

The Pacifier design has unique features, like the midrange control before the pre-gain section giving you a much sharper and defined control of your tone.

The high and low EQ controls are part of an active stack that sits after the pre-gain circuit. This gives these controls the widest range possible as you can go from entirely cut frequencies to heavily boosted tones that cut through the mix.

Now is time to sit on a comfy chair and wonder your audience (and why not yourself) with the most peaceful and relaxing sounds.

Controls

- Bass
- Gain
- Level
- Presence
- Treble

Bill of materials

Resistors	
Part	Value
R1	10K
R2	10K
R3	1M
R4	10K
R5	1M
R6	10K
R7	1K
R8	10K
R9	22K
R10	10K
R11	33K
R12	10K
R13	2M2
R14	4K7
R15	330R
R16	150R
R17	10K
RLED	4K7

Capacitors	
Part	Value
C3	100n
C4	150p
C5	47n
C6	2n2
C8	2n2
C9	2n2
C10	22n
C13	1u

Electrolytics Capacitors	
Part	Value
C1	100u
C2	47u
C7	4u7
C11	4u7
C12	4u7

Potentiometers	
Part	Value
BASS	B100K
GAIN	A1M
LEVEL	A10K
PRESENCE	B25K
TREBLE	B100K

IC	
Part	Value
IC1	opa2134

Transistors	
Part	Value
Q1	BC549C

Diodes	
Part	Value
D1	1N5817
D2	3mm red LED
D3	1n4148
D4	1n4148
D5	1n4148

Shopping list

Resistors		
Qty	Value	Parts
8	10K	R1, R2, R4, R6, R8, R10, R12, R17
1	150R	R16
1	1K	R7
2	1M	R3, R5
1	22K	R9
1	2M2	R13
1	330R	R15
1	33K	R11
2	4K7	R14, RLED

Capacitors		
Qty	Value	Parts
1	100n	C3
1	150p	C4
1	1u	C13
1	22n	C10
3	2n2	C6, C8, C9
1	47n	C5

Electrolytics Capacitors		
Qty	Value	Parts
1	100u	C1
1	47u	C2
3	4u7	C7, C11, C12

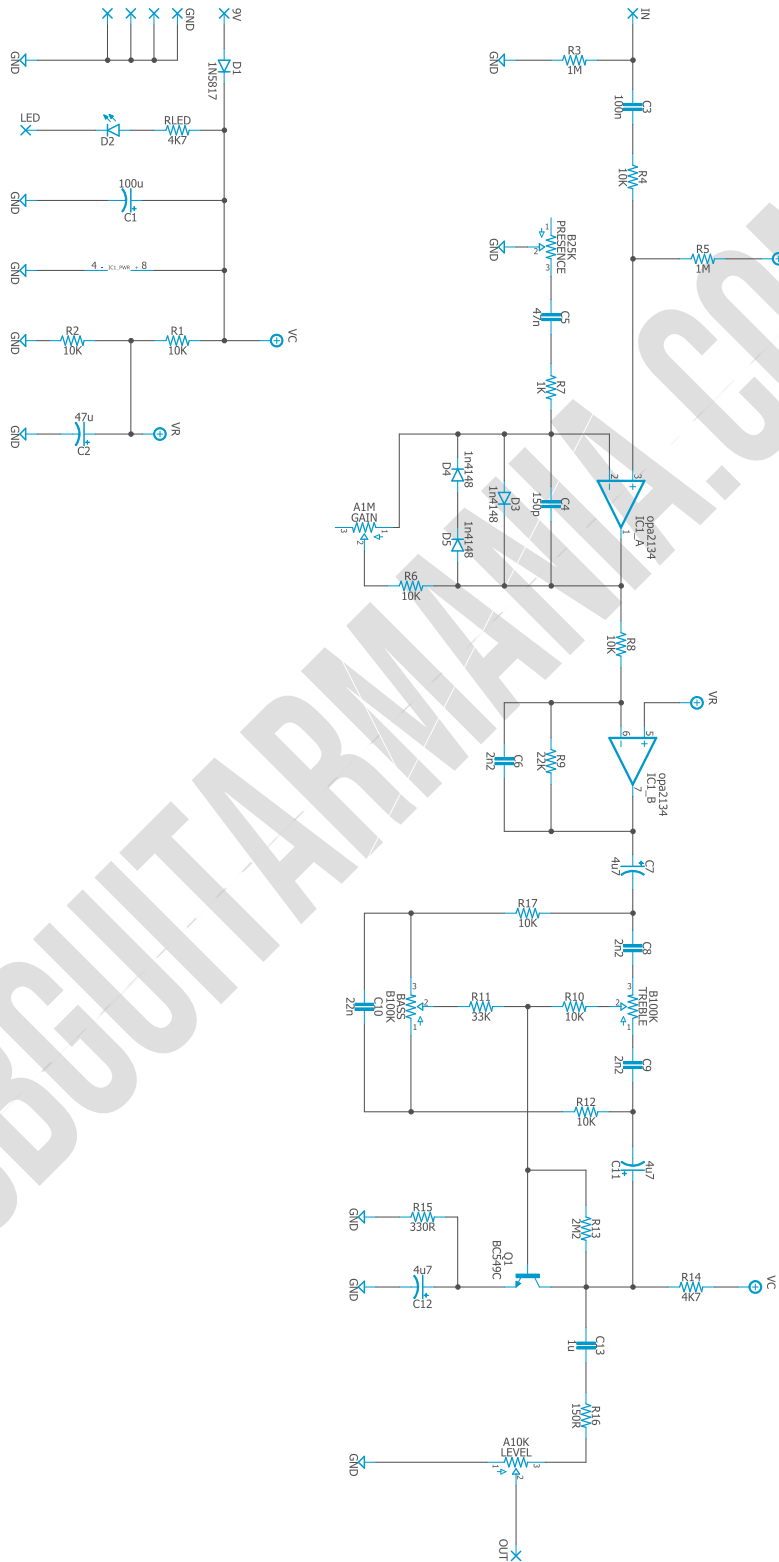
Potentiometers		
Qty	Value	Parts
1	A10K	LEVEL
1	A1M	GAIN
2	B100K	BASS, TREBLE
1	B25K	PRESENCE

IC		
Qty	Value	Parts
1	opa2134	IC1

Transistors		
Qty	Value	Parts
1	BC549C	Q1

Diodes		
Qty	Value	Parts
1	1N5817	D1
3	1n4148	D3, D4, D5
1	3mm red LED	D2

Schematic



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

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 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.

Follow us on [Instagram](#) and [Facebook](#) to stay in tune with the latest projects!