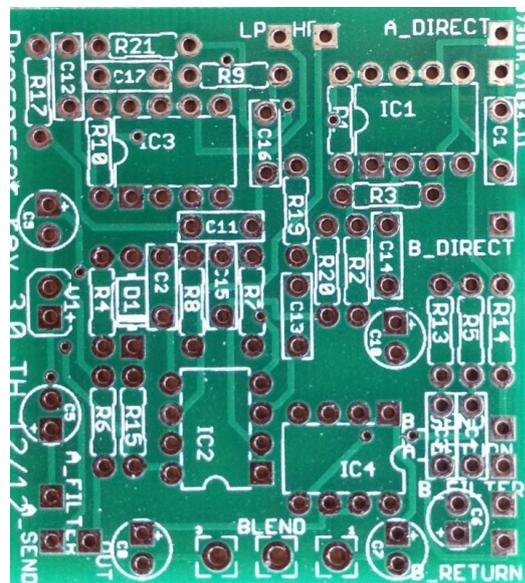
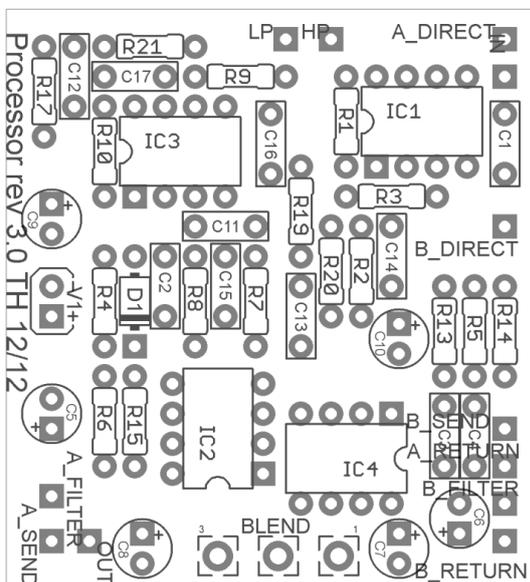


BILL OF MATERIALS

	Device#	Qty	Value	Comment
Resistors	R1, R2	2	33k	
	R3, R4, R5, R6, R13, R14	6	1M	
	R7, R19	2	3k9	
	R8	1	2k7	
	R9	1	3k3	
	R10	1	1k8	
	R15	1	100R	
	R17	1	1k	
	R20	1	820R	
	R21	1	560R	
Capacitors	C1, C3, C16	3	220n	
	C2	1	100n	
	C4	1	220nF	
	C5, C6, C7, C8	4	10uF	
	C9	1	47uF	
	C10	1	22uF	
	C11, C13	2	330n	
	C12	1	1u	
	C14	1	560n	
	C15	1	180n	
Pots	BLEND	1	25k-B	linear
Diodes	D1	1	1n4001	
ICs	IC1, IC2, IC3, IC4	4	TL072P	Use Burr Brown OPA2134 for extra low noise

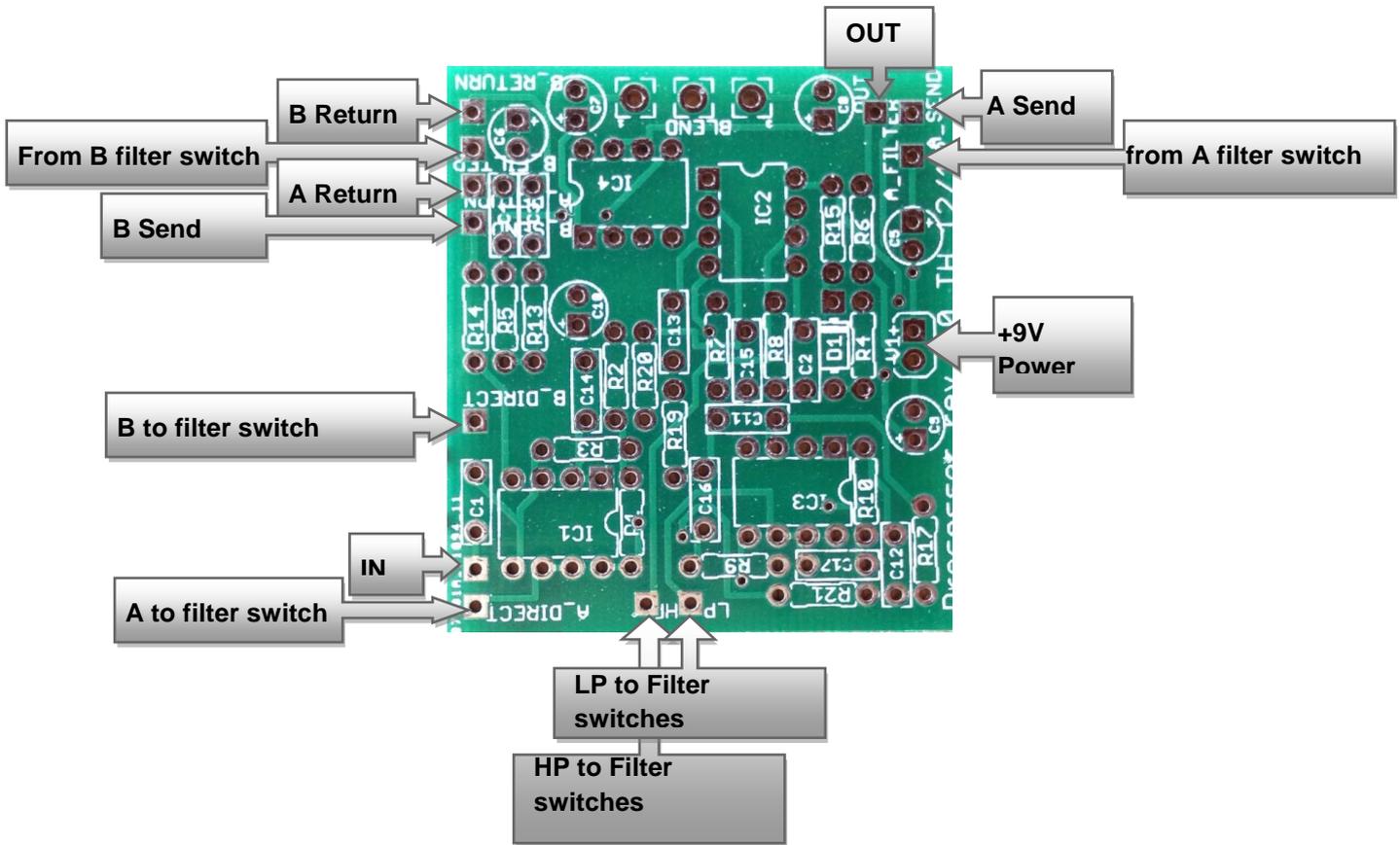
BUILDING

Start populating resistors and diode first, then IC sockets and capacitors. Last mount the BLEND pot from the backside. Due to the small size of the PCB and the narrow layout you should check if the capacitors you choose do fit in.



CONNECTIONS

There are a lot of connections on the board. This shows the full set of possibilities using all parts of the circuit. This is another schematic that has the Jacks included for a better understanding of the setup:

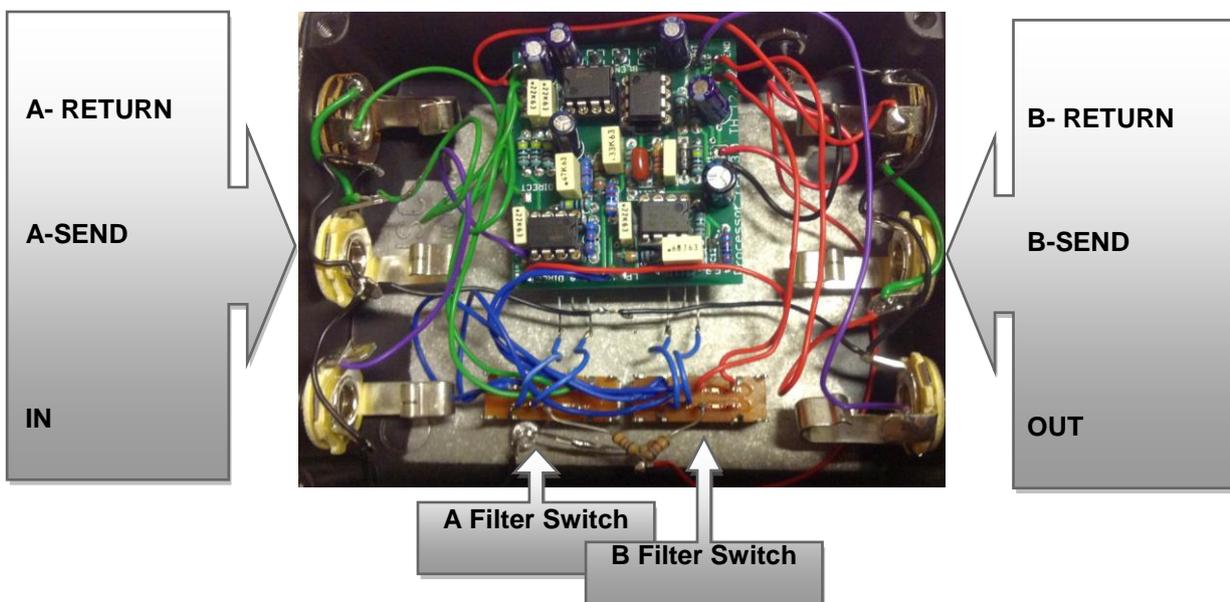


DETAILS:

It is assumed that you have used switched mono jacks for the Channel-Return Jacks and that the Channel-Send signal is connected to the switched pole of that jack. This way the connection from IN to OUT is working until a jack is plugged into the Return-jack.

The filter switch decides which signal goes to the channels Send Connector. There is one switch for each of the two channels. You can select to send the direct (buffered IN) signal, the LP filtered signal or the HP filtered signal.

This is the above setup in real life in the V3.0 prototype: (2nd row of the switches is used for bi-color LEDs)



FINALLY

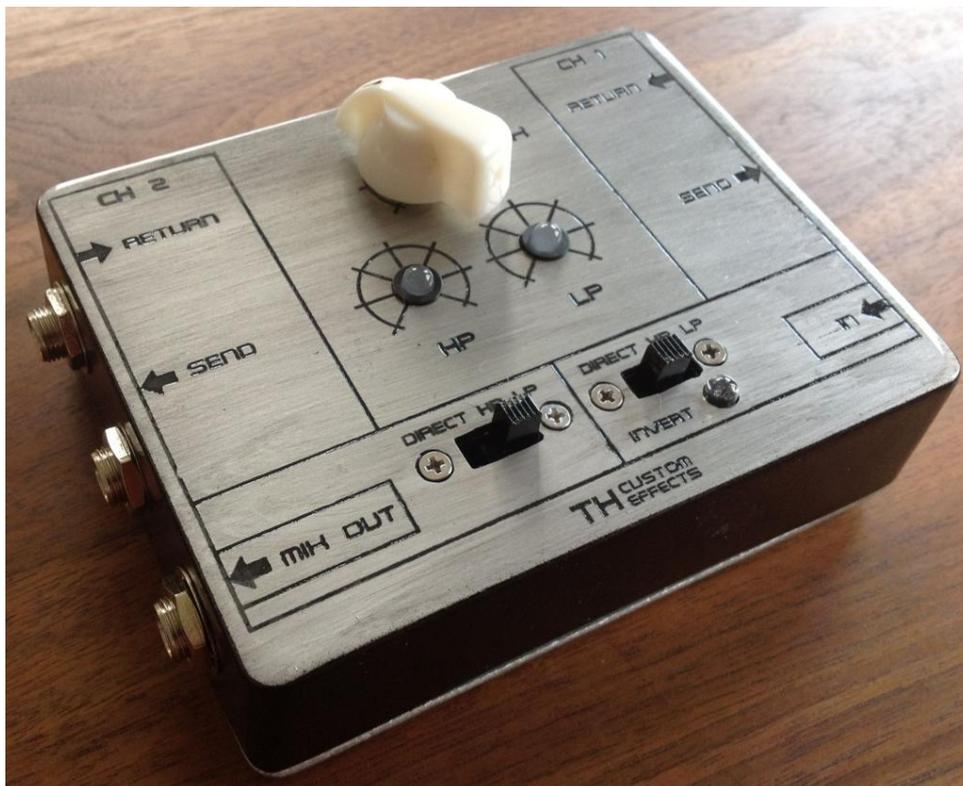
I did develop this for someone telling me he needs something for his acoustic guitar setup where only the lower frequencies should go through an Octaver effect whereas the higher frequencies should stay intact untouched.

The pro-cessor can do that by activating the LP-Filter for Channel B, sending it via B_Send to the Octaver, returning the signal via B_Return. Mixing it with the unaltered signal that runs via Channel A at the same time.

This is only one out of the possible uses of this tool. And if you only want to put effects on your pedal board: Try it with Channel A running through LP, Channel B running through HP and use the Blend-control to apply 24dB filtering. That can be called effect for sure.

It will be interesting what you did with the pro-cessor. Please let me know !

This is an example how it can be put into an enclosure:



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