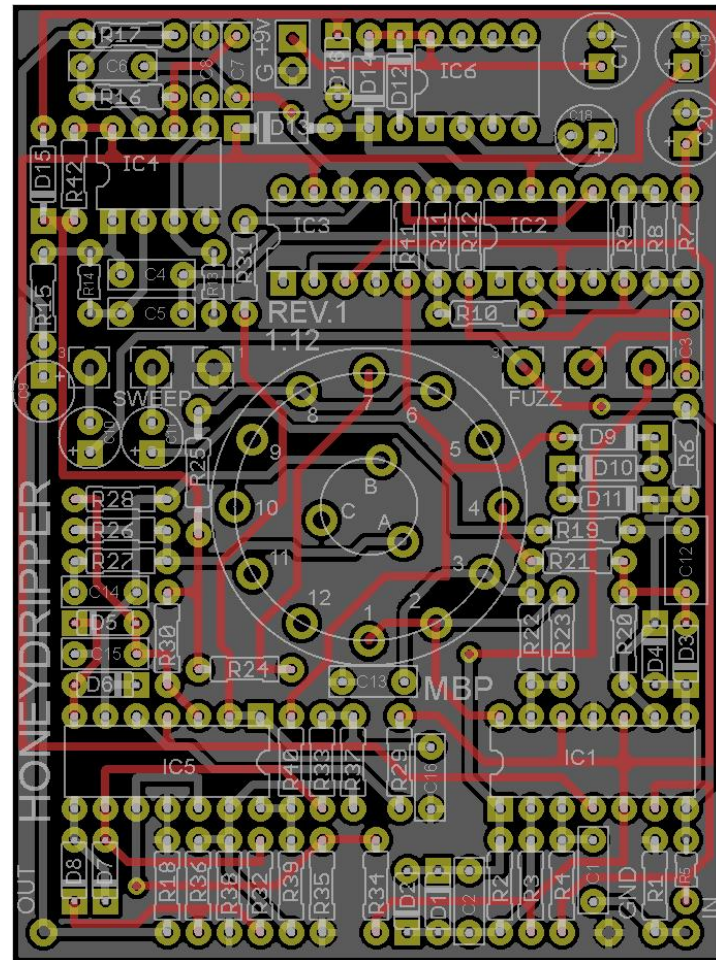
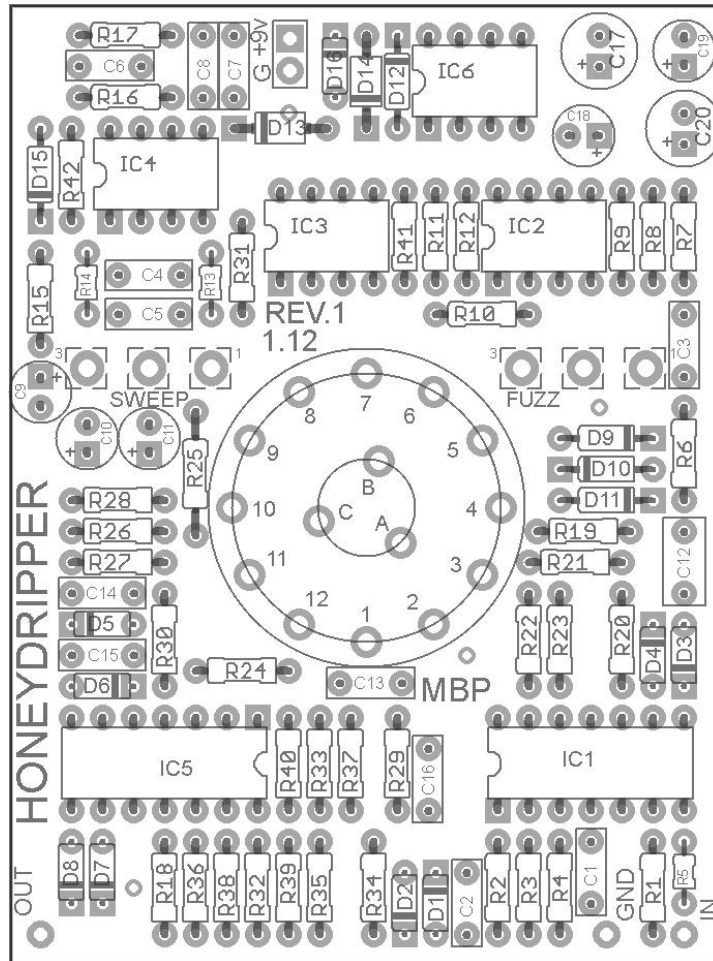


HONEY DRIPPER

01.12 madbeanpedals

REV.1 PCB

PCB Dimensions: 2.3" W x 3.1" H



Resistors		Resistors		Caps		Diodes	
R1	100k	R23	100k	C1	10n	D1 - D11	1n914
R2	2M7	R24	1M	C2	2n2	D12	9.1v
R3	27k	R25	2M2	C3	100n	D13, D14	1N4001
R4	100k	R26	1M	C4	4n7	D15, D16	5.1v
R5	180k	R27	220k	C5	4n7	ICs	
R6	4k7	R28	1M	C6	1n5	IC1	LM324
R7	1k	R29	470k	C7	1n5	IC2	CA3080E
R8	3k9	R30	1M	C8	100n	IC3	CA3080E
R9	100k	R31	10k	C9	2u2	IC4	JRC4558
R10	1k	R32	100k	C10	2u2	IC5	LM324
R11	3k9	R33	100k	C11	2u2	IC6	LT1054
R12	33k	R34	22k	C12	470n	Switch	
R13	47k	R35	27k	C13	220n	SW1	3P4T
R14	2M7	R36	47k	C14	100n	Pots	
R15	10k	R37	100k	C15	47n	FUZZ	10kB
R16	2M7	R38	220k	C16	100n	SWEEP	10kB
R17	4k7	R39	220k	C17	100uF		
R18	2k	R40	3k3	C18	10uF		
R19	1k	R41	3k3	C19	10uF		
R20	220k	R42	3k9	C20	100uF		
R21	1 - 10k						
R22	100k						

What Is It?

The **Honey Dropper** is based on the Colosound Dipthimizer™, a very unusual and short lived auto-wah type effect. The Dipthimizer™ was only made for a couple of years in the late 70's and is thus quite rare. Current eBay offerings price these somewhere close to \$1000. The effect itself is constructed from two parallel multiple feedback filters whose intensity is controlled by an envelope filter. Additionally, there is a four way rotary switch which changes the overall "vowel" driver produced by the envelope. This project requires a 125-B enclosure, or larger.

NOTE: This is the revised version of the Honey Dropper PCB. The version released in Nov. 2011 had a major mistake in the power supply which caused the effect to work incorrectly. All customers who purchased the original PCB have been given replacements. The replacement PCBs all have "REV.1 -1.12" printed on them so make sure you are building the revised version!

Controls

Fuzz – This controls the amount of fuzz blended in with the clean input signal. Note that the fuzz effect is at maximum at fully counter-clockwise like the original Dipthimizer™.

Sweep – This sets the intensity of the envelope that drives the feedback filter.

SW1 – This is a 3-pole, 4-terminal rotary switch which changes the vowel type (labeled Yeh, Bow, Wah, Yae).

These mods are highly recommended

Change **R5** from 180k to something between a 220k and 330k for increased output.

Change **C2** from 2n2 to a smaller value for a brighter sound. My preference here is a 560pF Silver Mica cap.

Socket **R21**. Try 1k – 10k here. My preference is 2k. Smaller values increase the intensity of the filter.

Additional Mods (untested)

Grit – Change **D1/D2** to another diode type like germanium or BAT41 for more fuzzy grit.

Envelope mod – Change **D3&D4** to either 1n34a or BAT41 for a more dynamic envelope.

Filter mod – **C4/C5** and **C6/C7** form the basis of the feedback filter. Experiment with other matched pairs, such as 5n6/2n2 or 6n8/1n5.

CA3080E at Smallbear: <http://www.smallbearelec.com/Detail.bok?no=219>

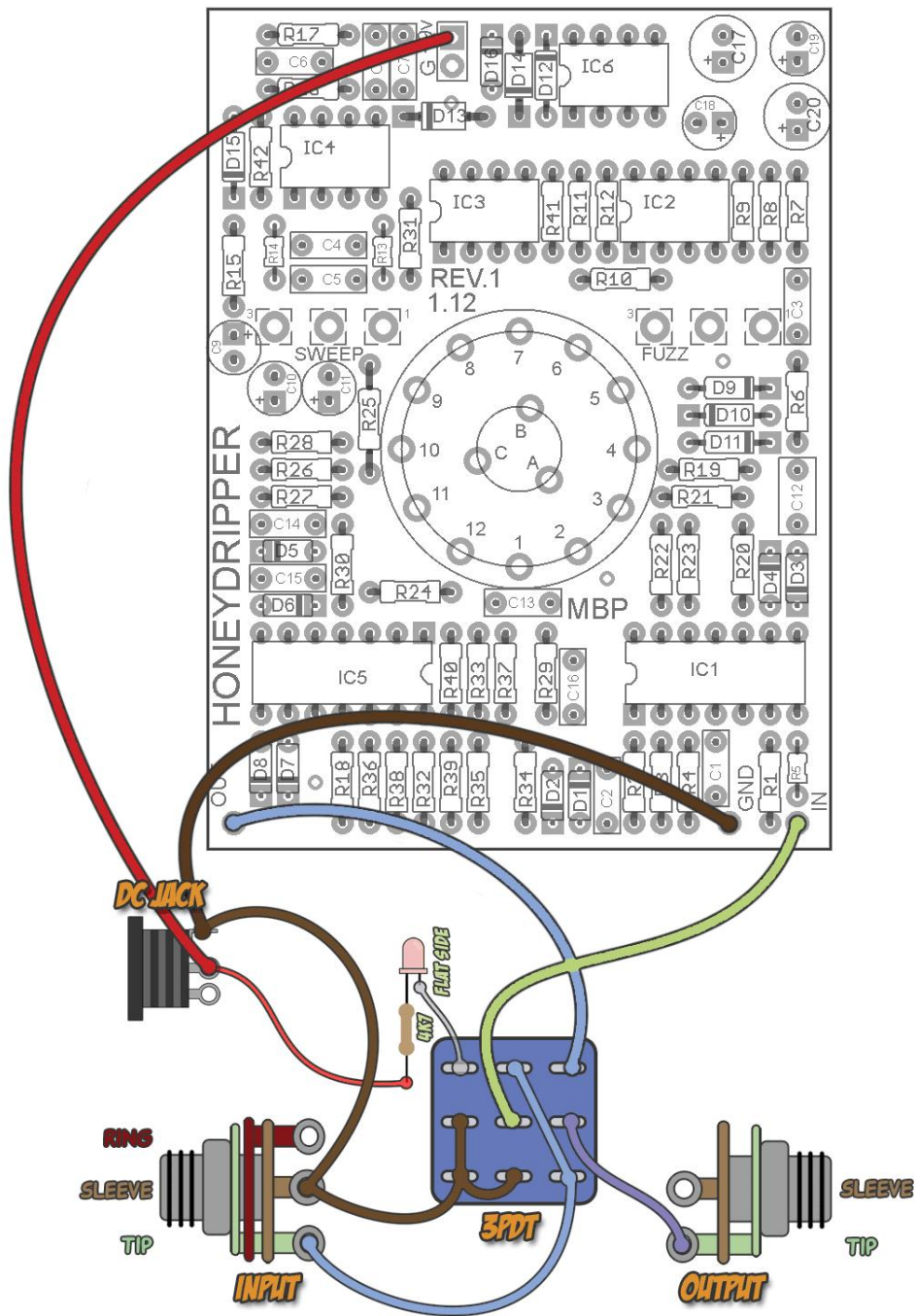
3P4T switch at Smallbear: <http://www.smallbearelec.com/Detail.bok?no=46>

- You can also find the 3080's on eBay. Just use care to get them from a trustworthy source!

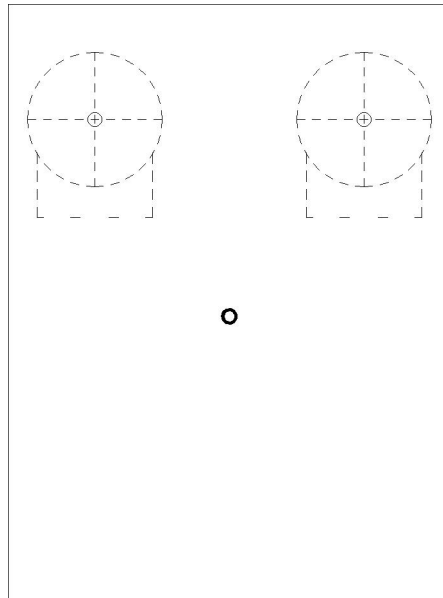
- You can use 16mm short pin PCB mounted pots for the Fuzz and Sweep controls. Note that the pots go underneath the board and are mounted 3-2-1.

Special thanks for FSB forum member borislavgajic who did much of the work illuminating this mysterious and rare effect! More thanks to MBP forum member marauder who helped correct some of the mistakes in the original HoneyDropper schematic.

Wiring



Pot/Switch Drill layout
(Actual Size)



Licensing

*The user may utilize a purchased **Honey Dripper** PCB from madbeanpedals for DIY/non-commercial purposes. You may not use the artwork to sell your own version of the PCB design or as part of a “kit” or similar commercial product.*

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