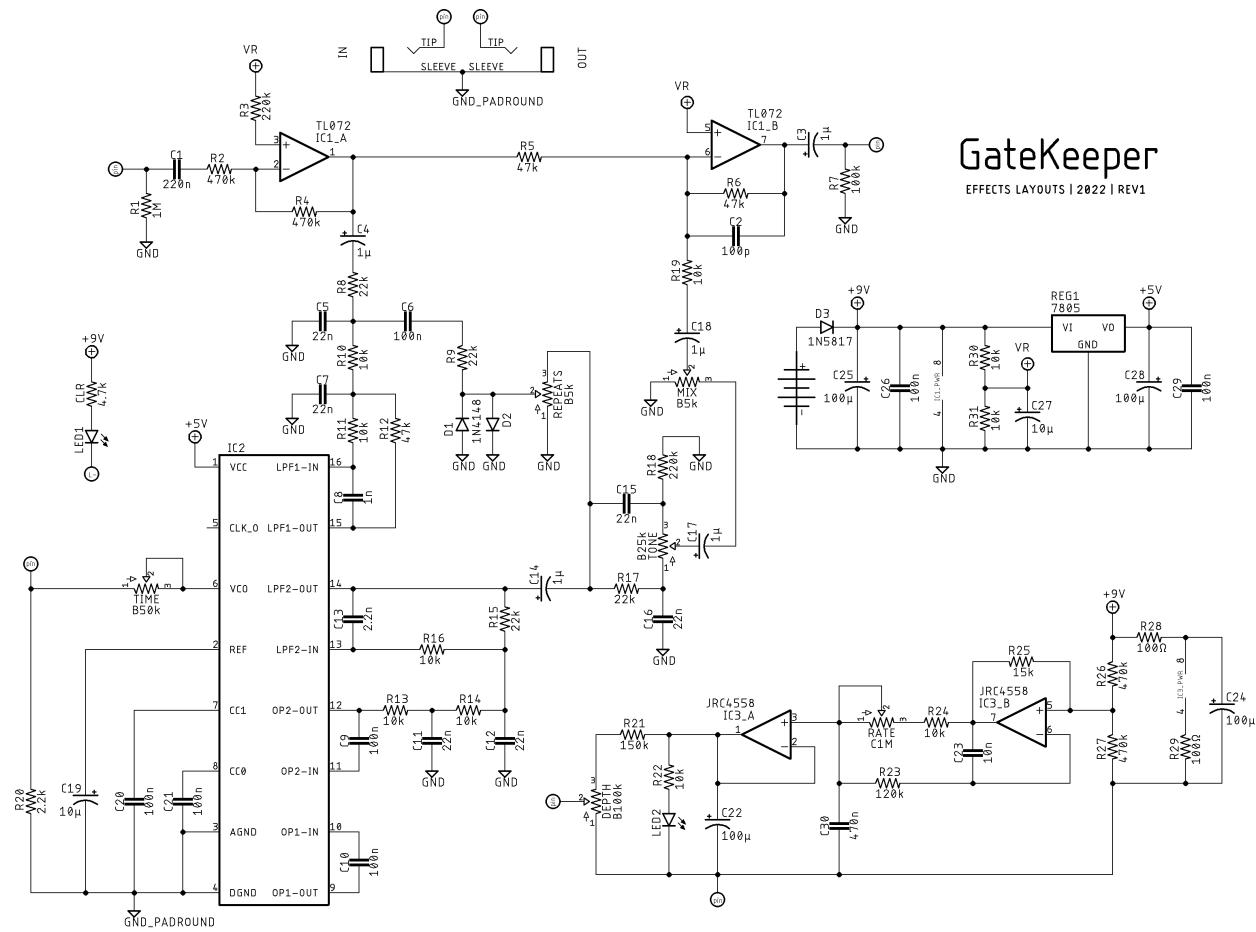


GATEKEEPER

DESCRIPTION

The GATEKEEPER is based on the now discontinued EarthQuaker Devices Disaster Transport. It's an analog voiced PT2399 digital delay with modulation on a footswitch. One of the coolest things about this delay is the BMP tone stack in the output section of the PT2399. This allows you to filter out unwanted noise at longer delay settings. The modulation has a wide range of speeds on tap and is visually represented by an LED.

SCHEMATIC



BOM

Resistors

R1	1M
R2	470k
R3	220k
R4	470k
R5	47k
R6	47k
R7	100k
R8	22k
R9	22k
R10	10k
R11	10k
R12	47k
R13	10k
R14	10k
R15	22k
R16	10k
R17	22k
R18	220k
R19	10k
R20	2.2k
R21	150k
R22	10k
R23	120k
R24	10k
R25	15k
R26	470k
R27	470k
R28	100Ω
R29	100Ω
R30	10k
R31	10k
CLR	4.7k

Capacitors

C1	220n
C2	100p
C3	1μ
C4	1μ
C5	22n
C6	100n
C7	22n

C8	1n
C9	100n
C10	100n
C11	22n
C12	22n
C13	2.2n
C14	1μ
C15	22n
C16	22n
C17	1μ
C18	1μ
C19	10μ
C20	100n
C21	100n
C22	100μ
C23	10n
C24	100μ
C25	100μ
C26	100n
C27	10μ
C28	100μ
C29	100n
C30	470n

Semiconductors

D1	1N4148
D2	1N4148
D3	1N5817
IC1	TL072
IC2	PT2399
IC3	JRC4558
LED1	3mm LED
LED2	3mm LED
REG1	7805

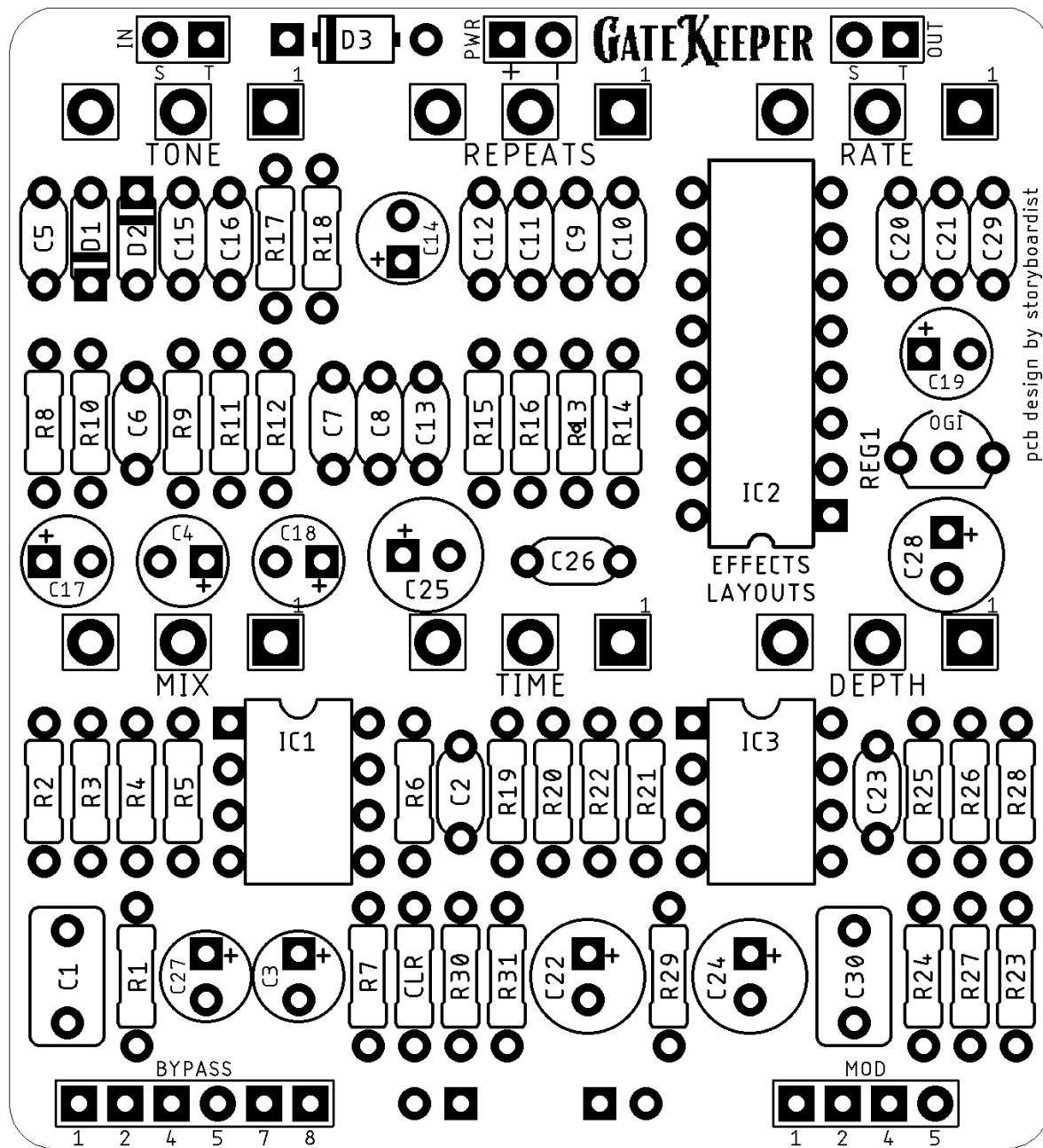
Electromechanical

Depth	B100k
Mix	B5k
Rate	C1M
Repeats	B5k
Time	B50k
Tone	B25k

SHOPPING LIST

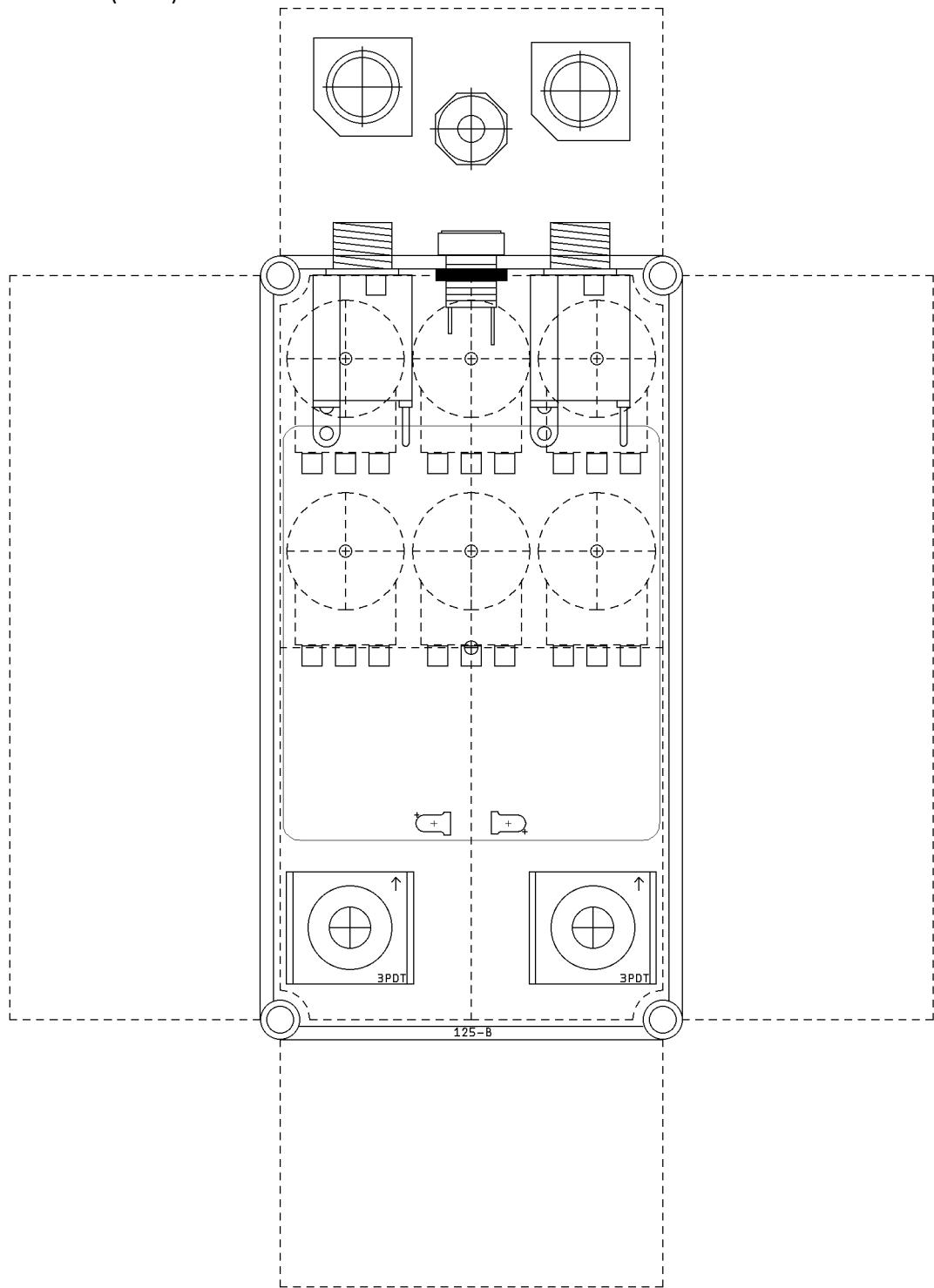
Value	Type (suggested)	Quantity
100Ω	¼ watt metal or carbon film	2
2.2k	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	1
10k	¼ watt metal or carbon film	10
15k	¼ watt metal or carbon film	1
22k	¼ watt metal or carbon film	4
47k	¼ watt metal or carbon film	3
100k	¼ watt metal or carbon film	1
120k	¼ watt metal or carbon film	1
150k	¼ watt metal or carbon film	1
220k	¼ watt metal or carbon film	2
470k	¼ watt metal or carbon film	4
1M	¼ watt metal or carbon film	1
100p	Ceramic	1
1n	Film	1
2.2n	Film	1
10n	Film	1
22n	Film	6
100n	Film	7
220n	Film	1
470n	Film	1
1μ	Electrolytic (25v+)	5
10μ	Electrolytic (25v+)	2
100μ	Electrolytic (25v+)	4
1N4148	Switching diode	2
1N5817	Schottky rectifier diode	1
7805	5v regulator	1
JRC4558	Dual opamp	1
LED	3 or 5mm	2
PT2399	Echo processor	1
TL072	Dual opamp	1
B5k	16mm board mounted potentiometer	2
B25k	16mm board mounted potentiometer	1
B50k	16mm board mounted potentiometer	1
B100k	16mm board mounted potentiometer	1
C1M	16mm board mounted potentiometer	1

LAYOUT



Note: Bypass switch is a standard 3PDT and Mod switch is a DPDT.

DRILL TEMPLATE (125B)



EFFECTS LAYOUTS © 2022
For DIY and small commercial applications.
Not for non-peer to peer resale.