

# Breakpoint Generator Bill of Materials v1.0

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October 2021

## Parts

C1,C2	10u	Electrolytic, 5mm lead space
C3,C4,C5,C6,C7,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23	100n	0805 X7R
C8,C9,C10,C11,C12,C13	47p	0805 C0G
D1,D2,D3,D5	1N4148	SOD123
L1,L2	Ferrite	0805
R32,R33,R37,R38,R42,R43,R47,R48	220R	0805
R57,R58	330R	0805
R12	1k	0805
R10,R11,R13,R15,R16,R17,R18,R19,R20,R27,R28,R29,R34,R39,R44,R49	10k	0805
R2,R4,R6,R8,R22,R24,R26	22k	0805
R55	33k	0805
R1,R3,R5,R7,R9,R14,R21,R23,R25,R30,R31,R35,R36,R40,R41,R45,R46,R50,R51,R52,R53,R54,R56	100k	0805
T1,T2,T3,T4	MMBT3906	SOT23
U1,U2	TL074	SO14
U3,U4	TL072	SO08
IC1	LM4040-5	SOT23
IC2,IC3	LM13700	SO16
VR1,VR2,VR3,VR4	100k	BOURNS 3362P TRIMMER
X1	KK-156-4	MTA156/ KK156 power header

Gain of output needs adjusting. Fiddle with R54, R55, R56. Probably need to use the IOU+T to have enough oomph. Haven't really tuned this up yet.

## Pads

-5V	-5V reference
0V	0V pad
5V	5V reference
B1	breakpoint 1 input
B2	breakpoint 2 input
B3	breakpoint 3 input
B4	breakpoint 4 input
G1	gain 1 input
G2	gain 2 input
G3	gain 3 input
G4	gain 4 input
V+	12V rail
V-	-12V rail
IN	signal input
O	output
OI	inverted output