

flight of harmony
Plague Bearer

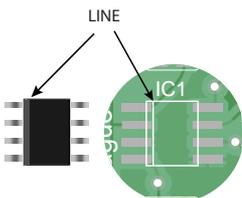
Eurorack Module Kit
 ~rev 2.0~



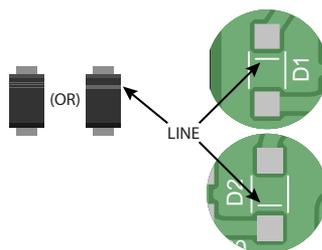
Specifications

Supply Voltage (min -> max)	$\pm 9V \rightarrow \pm 15V$
Supply Current (max draw @ $\pm 12V$)	+12V: 6.5mA -12V: 4.0mA
Input Voltage (@ $\pm 12V$)	$0V_{pp} \rightarrow 10V_{pp}$
Max Output Voltage	$\pm 5V$
Input & Output (I/O) coupling	Capacitive (AC)
Control Voltage (CV) inputs	$0V \rightarrow V+$
CV input coupling	Direct (DC)
CV input impedance	100k Ω

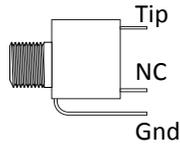
IC1 Orientation



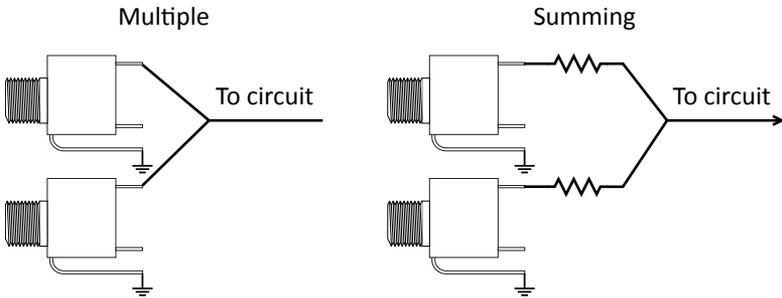
D1 & D2 Orientation



JACK CONNECTIONS (INJP1, INJP2, OUTJP1, OUTJP2)



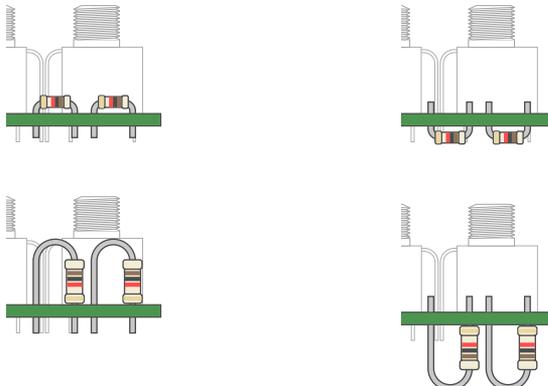
The Output and Input jacks can be connected as multiples (not isolated) or summing (isolated). This option is up to your preference, as the standard Plague Bearer module has its jacks wired as multiples.

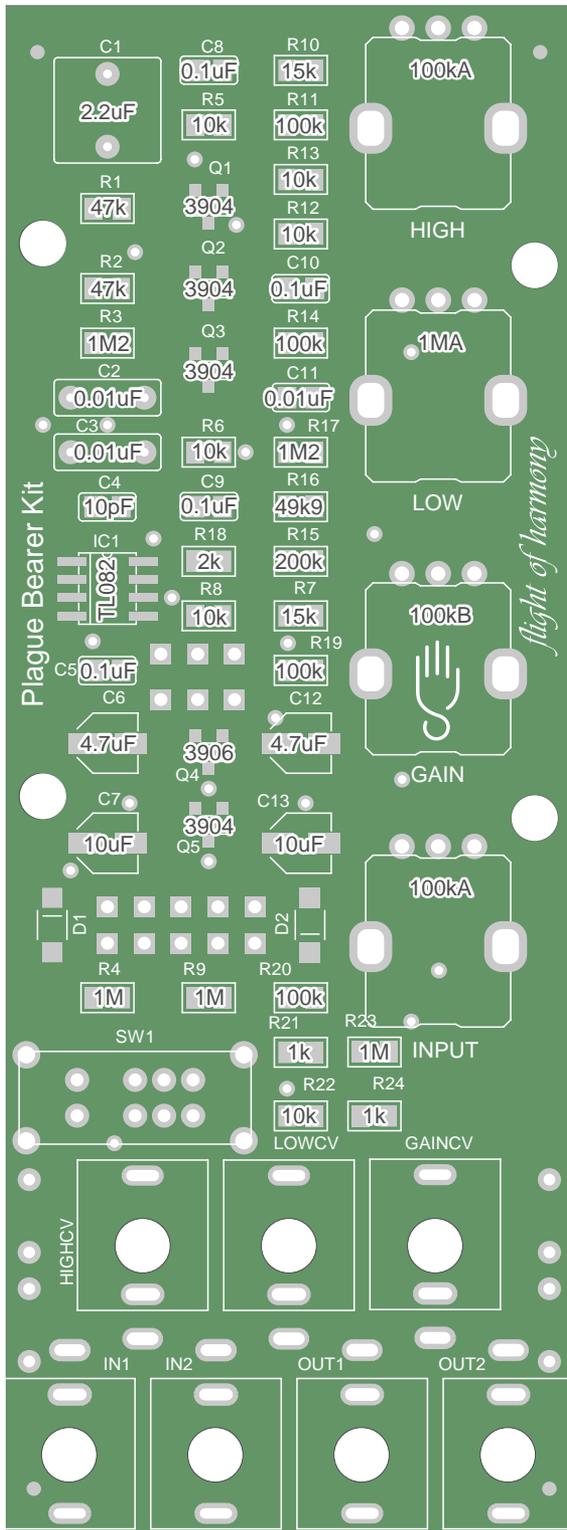


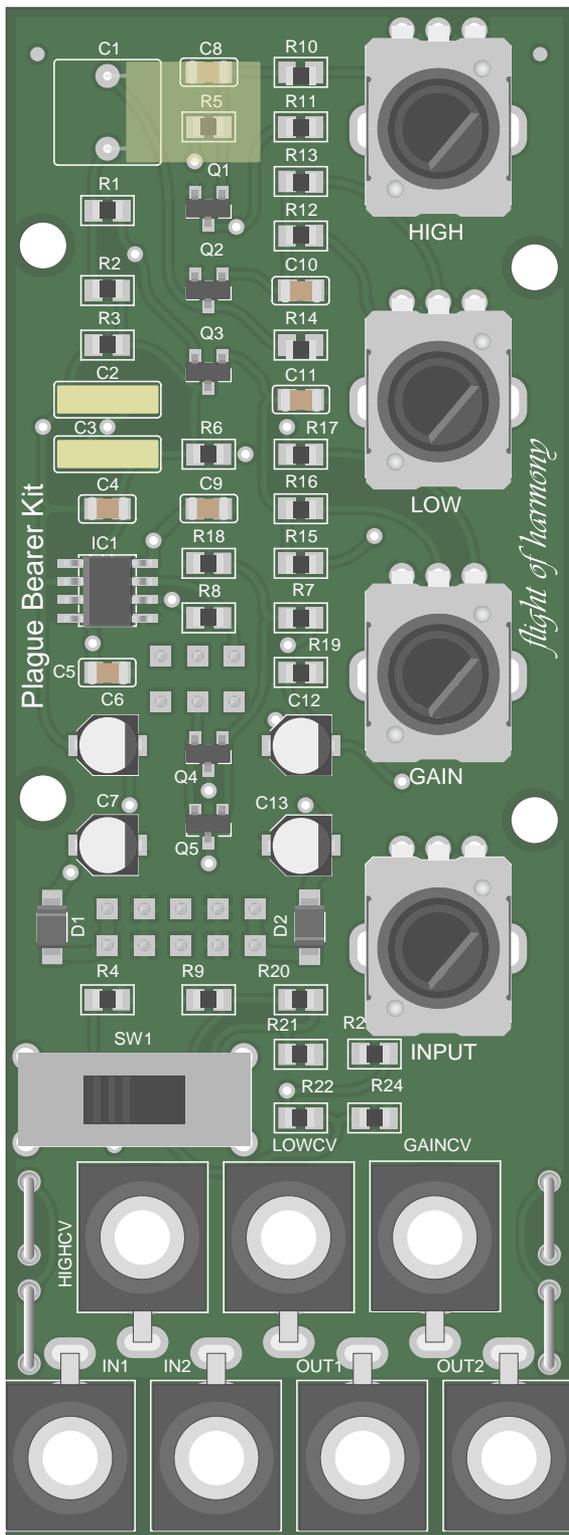
For standard operation as multiples, solder jumper wires in either arrangement shown:



For summing configuration, insert resistors of your choice in the jumper locations. This option has NOT been evaluated by f(h) and will affect the signal levels, as you are adding resistance to the input and output path. Possible mounting orientations are shown below. In the latter examples, make sure the leads do not make contact with the faceplate.







Plague Bearer Kit

Aight of harmony

C1

C8

R10

HIGH

R1

Q1

R11

R13

R12

C10

R14

C11

LOW

C2

C3

C4

IC1

R6

C9

R17

R16

R15

R7

R19

C12

GAIN

C5

C6

C7

Q4

Q5

C13

D1

D2

R4

R9

R20

INPUT

SW1

R21

R23

R22

R24

LOWCV

GAINCV

HIGHCV

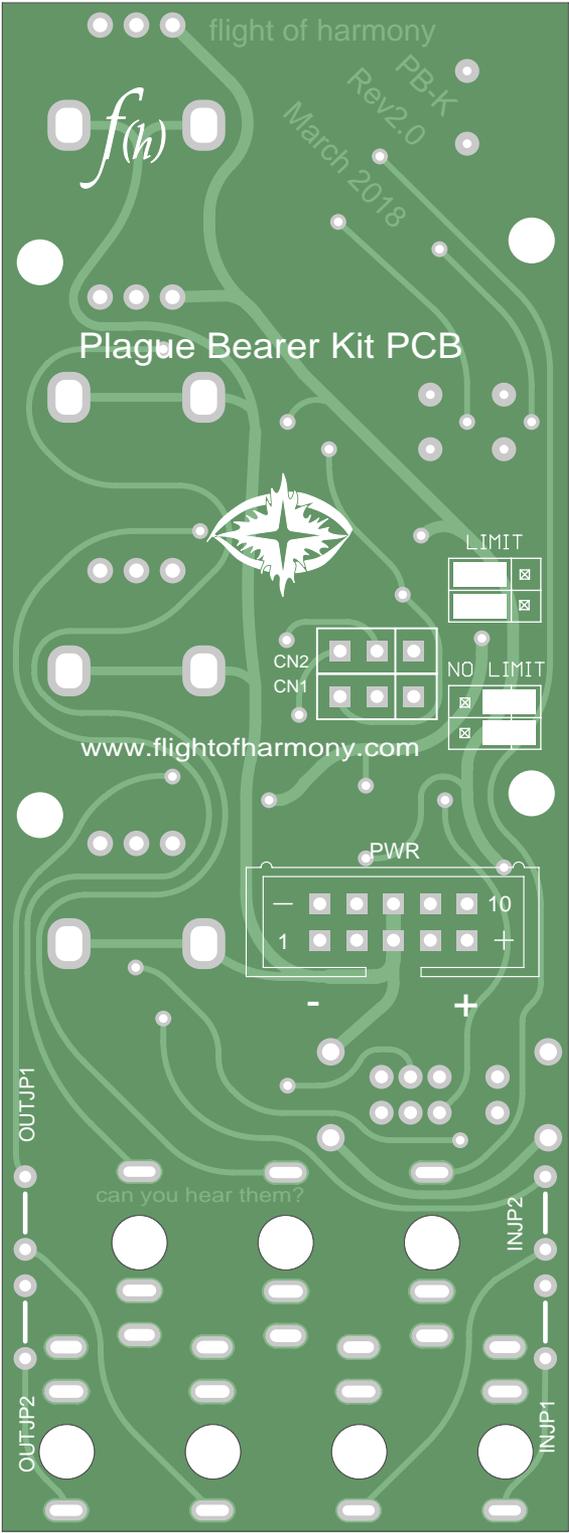


IN1

IN2

OUT1

OUT2



flight of harmony

$f(n)$

March 2018

Plague Bearer Kit PCB



LIMIT

<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

CN2
CN1

<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

NO LIMIT

www.flightofharmony.com

PWR



OUTJP1

can you hear them?

INJP2

OUTJP2

INJP1

Part	Value	Qty	Package	Manufacturer	Manufacturer PN	Description
IC1	TL082	1	S08	STMicro	TL082CDT	TL082 Dual op-amp
D1, D2	FSV360	2	SOD-123		FSV360FP	Schottkey power diode
Q1, Q2, Q3, Q5	3904	4	SOT-23-3	Fairchild	MMBT3904LT1G	NPN Transistor
Q4	3906	1	SOT-23-3	Fairchild	MMBT3906LT1G	PNP transistor
C2	10pF	1	0805	AVX	08055A100CA72A	MLCC, SMT
C2, C3	0.01uF	2	C050-025X075	Kemet	R82MCC1002350J	Plastic film box capacitor, radial, 5mm LS, Bulk, 17mm Lead length
C11	0.01uF	1	0805	Kemet	C0805C103K3RACTU	MLCC, SMT
C5, C8, C9, C10	0.1uF	4	0805	Kemet	C0805C104K3RACTU	MLCC, SMT
C1	2.2uF	1	C050-075X075	Kemet	R82CC4220DQ70J	Plastic film box capacitor, radial, 5mm LS, Ammo Pak, 18.5mm Lead length
C6, C12	4.7uF	2	B	CDE	AVE475M25B1ZT-F	Aluminum electrolytic capacitor, SMT
C7, C13	10uF	2	B	Panasonic	EEE-FK1V100UR	Aluminum electrolytic capacitor, SMT
R21, R24	1k	2	0805	Vishay	CRCW08051K00FKTA	SMT 0.125W thick film resistor
R18	2k	1	0805	Vishay	CRCW08052K00FKTA	SMT 0.125W thick film resistor
R5, R6, R8, R12, R13, R22	10k	6	0805	Vishay	CRCW080510K0FKTA	SMT 0.125W thick film resistor
R7, R10	15k	2	0805	Vishay	CRCW080515K0FKTA	SMT 0.125W thick film resistor
R1, R2	47k	2	0805	Vishay	CRCW080547K0FKTA	SMT 0.125W thick film resistor
R16	49k9	1	0805	Vishay	CRCW080549K9FKTA	SMT 0.125W thick film resistor
R11, R14, R19, R20	100k	4	0805	Vishay	CRCW0805100KFKA	SMT 0.125W thick film resistor
R15	200k	1	0805	Vishay	CRCW0805200KFKA	SMT 0.125W thick film resistor
R4, R9, R23	1M	3	0805	Vishay	CRCW08051M00FKTB	SMT 0.125W thick film resistor
R3, R17	1M2	2	0805	Vishay	CRCW08051M21FKA	SMT 0.125W thick film resistor
GA1N	B100k	1		Alpha	RD901F-40B1-15FW-B100K	9mm vertical Potentiometer 15mm D-shaft, M7 bush
HIGH, INPUT	A100k	2		Alpha	RD901F-40B1-15FW-A100K	9mm vertical Potentiometer 15mm D-shaft, M7 bush
LOW	A1M	1		Alpha	RD901F-40B1-15FW-A1M	9mm vertical Potentiometer 15mm D-shaft, M7 bush
SW101		1	EG2301	E-Switch	EG2301A	DP3T Slide switch
GAINCV, HIGHCV, IN1, IN2, LOWCV, OUT1, OUT2		7		Thonk	PJ301M-12	3.5mm mono phone jack PCB mount
CN1, CN2		2		3M	929647-01-03-EU	1x3 pin header
PWR-E		1		3M	30310-6002HB	5x2 Shrouded box header
Knob		4		Eagle	450-4761	14mm Soft-Touch Knob with Red Pointer (T18)
IN1P1, IN1P2, OUT1P1, OUT1P2		4		KOA		Wire jumper
PCB		1				
Panel		1				
Shunt		2				Shunt for CN1 & CN2

