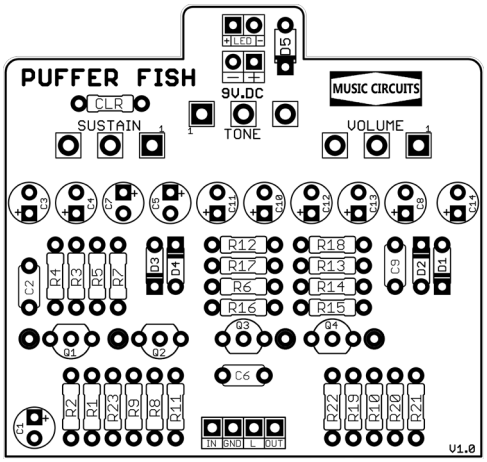
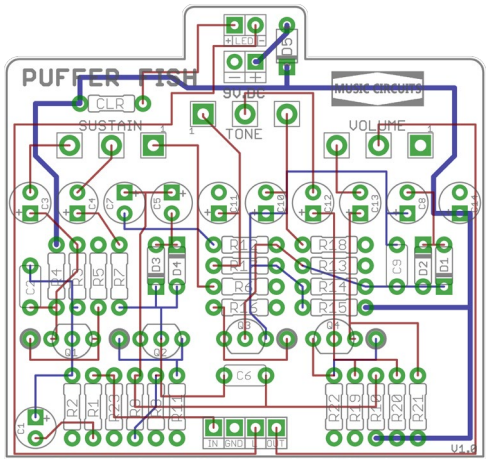
PUFFER FISH (V1.0)
Based on the EHX® BIG MUFF
REVISION 01.09.2022



COMPONENT LAYOUT



TRACE LAYOUT

EFFECT TYPE: FUZZ

BOARD DIMENSIONS
2.30 x 2.18 inches (58.4 x 55.3mm)

Fits: 125B Enclosure

Please take your time and enjoy.

This document includes:

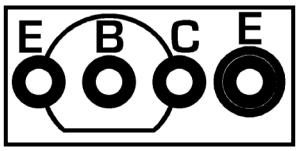
- ***Bill of Materials***
- ***Schematic***
- ***Drill Template***
- ***Wiring Diagram***

BOM: BIG MUFF (PUFFER FISH)

VARIOUS VERSIONS AVAILABLE

***BE AWARE OF THE TRANSISTOR PINOUT**

***THE SILKSCREEN LAYOUT IS EBC**



***AN EXTRA PAD HAS BEEN PROVIDED SHOULD YOU WISH TO EXPERIMENT WITH WHAT TRANSISTORS YOU USE**

2N5088=EBC (fits as is)
BC549C=CBE (rotate 180°)
2N706A can be difficult to source, it's a 'CAN' type TO-18 Package (legs can be manipulated to fit)

BIGGER MUFF

Resistors		***Capacitors***	
R1	33k	C1	10uf
R2	100k	C2	47p
R3	470k	C3	100n
R4	12k	C4	100n
R5	100R	C5	100n
R6	8k2	C6	47p
R7	10k	C7	10uf
R8	100k	C8	100n
R9	470k	C9	47p
R10	12k	C10	4n7
R11	100R	C11	10n
R12	10k	C12	100n
R13	100k	C13	10uf
R14	470k	C14	100uf
R15	12k	***Transistors***	
R16	100R	Q1	2N706A
R17	33k	Q2	2N706A
R18	33k	Q3	2N706A
R19	100k	Q4	2N706A
R20	510k	***Diodes***	
R21	12k	D1	1N914
R22	3k3	D2	1N914
R23	1M	D3	1N914
CLR	4k7	D4	1N914
		D5	1N5817
		Pots	
		SUSTAIN	B100k
		TONE	B100k
		VOL	A100k

CIVIL WAR

Resistors		***Capacitors***	
R1	39k	C1	100n
R2	100k	C2	430p
R3	470k	C3	100n
R4	12k	C4	100n
R5	390R	C5	47n
R6	1k	C6	430p
R7	10k	C7	100n
R8	100k	C8	47n
R9	470k	C9	430p
R10	12k	C10	3n9
R11	390R	C11	10n
R12	10k	C12	100n
R13	100k	C13	100n
R14	470k	C14	100uf
R15	12k	***Transistors***	
R16	390R	Q1	2N5088
R17	20k	Q2	2N5088
R18	22k	Q3	2N5088
R19	100k	Q4	2N5088
R20	470k	***Diodes***	
R21	10k	D1	1N914
R22	2k7	D2	1N914
R23	1M	D3	1N914
CLR	4k7	D4	1N914
		D5	1N5817
		Pots	
		SUSTAIN	B100k
		TONE	B100k
		VOL	A100k

FOXY LADY-GUILD

Resistors	
R1	33k
R2	100k
R3	470k
R4	12k
R5	100R
R6	8k2
R7	7k5
R8	100k
R9	470k
R10	12k
R11	100R
R12	7k5
R13	100k
R14	470k
R15	12k
R16	100R
R17	33k
R18	100k
R19	100k
R20	390k
R21	12k
R22	3k3
R23	1M
CLR	4k7

Capacitors	
C1	120n
C2	none
C3	120n
C4	120n
C5	120n
C6	470p
C7	120n
C8	120n
C9	470p
C10	4n7
C11	100n
C12	120n
C13	120n
C14	100uf
Transistors	
Q1	2N5089
Q2	2N5089
Q3	2N5089
Q4	2N5089
Diodes	
D1	1N914
D2	1N914
D3	1N914
D4	1N914
D5	1N5817
Pots	
SUSTAIN	A100k
TONE	B100k
VOL	A100k

J MASCIS

Resistors	
R1	39k
R2	100k
R3	470k
R4	15k
R5	100R
R6	1k
R7	8k2
R8	100k
R9	470k
R10	15k
R11	100R
R12	8k2
R13	100k
R14	470k
R15	15k
R16	100R
R17	39k
R18	22k
R19	100k
R20	430k
R21	10k
R22	3k3
R23	1M
CLR	4k7

Capacitors	
C1	1uf
C2	470p
C3	100n
C4	100n
C5	1uf
C6	470p
C7	100n
C8	1uf
C9	470p
C10	4n7
C11	10n
C12	100n
C13	1uf
C14	100uf
Transistors	
Q1	2N5088
Q2	2N5088
Q3	2N5088
Q4	2N5088
Diodes	
D1	1N914
D2	1N914
D3	1N914
D4	1N914
D5	1N5817
Pots	
SUSTAIN	B100k
TONE	B100k
VOL	A100k

RAMS HEAD

Resistors	
R1	33k
R2	100k
R3	470k
R4	12k
R5	100R
R6	1K
R7	8K2
R8	100k
R9	470k
R10	12k
R11	100R
R12	8K2
R13	100K
R14	470k
R15	12k
R16	100R
R17	33k
R18	33k
R19	100k
R20	470K
R21	12k
R22	4k7
R23	1M
CLR	4k7

Capacitors	
C1	100n
C2	470p
C3	100n
C4	100n
C5	100n
C6	470p
C7	100n
C8	100n
C9	470p
C10	3n9
C11	10n
C12	100n
C13	100n
C14	100uf
Transistors	
Q1	2N706A
Q2	2N706A
Q3	2N706A
Q4	2N706A
Diodes	
D1	1N914
D2	1N914
D3	1N914
D4	1N914
D5	1N5817
Pots	
SUSTAIN	B100k
TONE	B100k
VOL	A100k

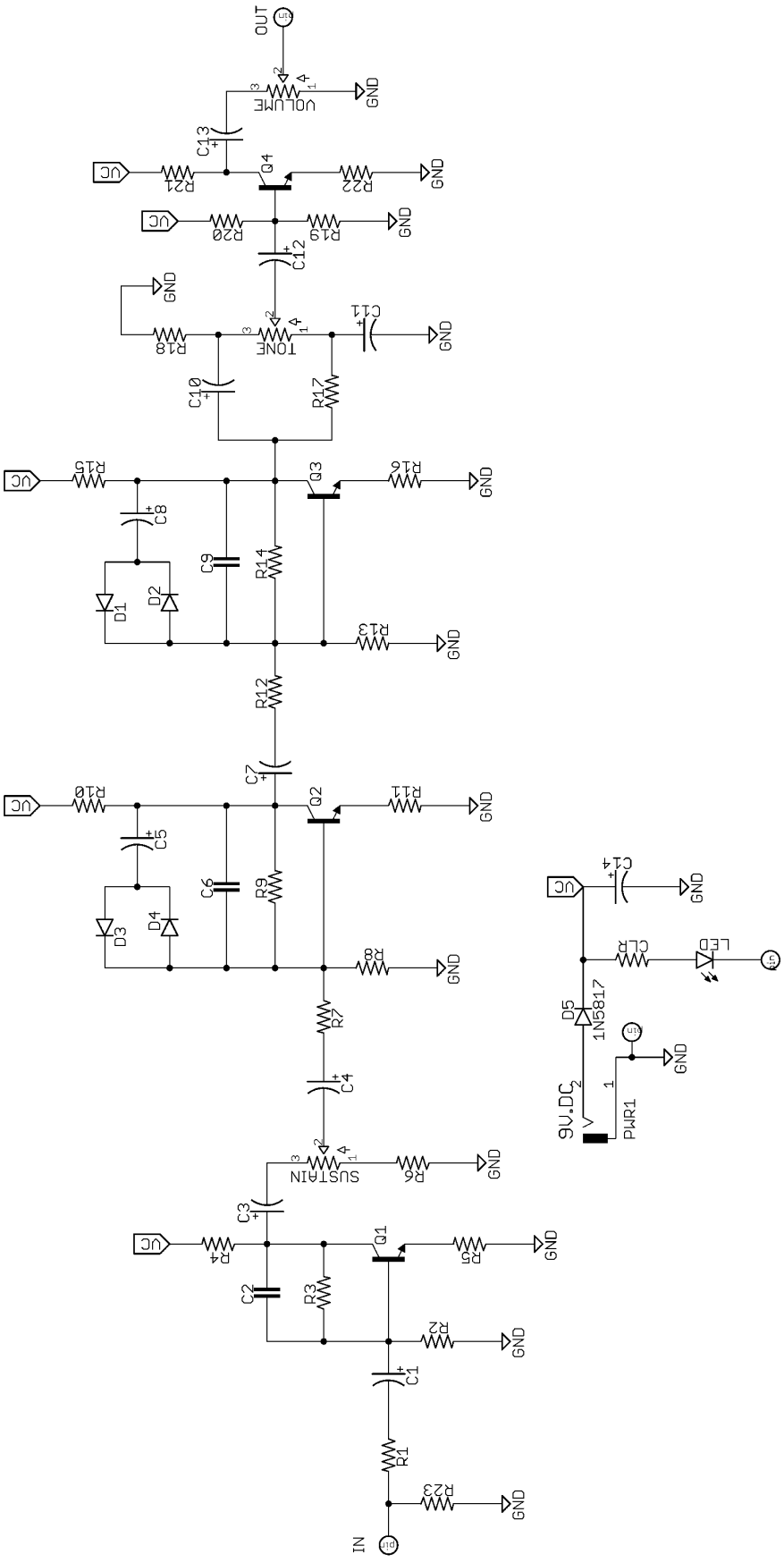
GREEN RUSSIAN

Resistors		Capacitors	
R1	39k	C1	100n
R2	100k	C2	470p
R3	470k	C3	100n
R4	12k	C4	100n
R5	390R	C5	47n
R6	1k	C6	470p
R7	10k	C7	100n
R8	100k	C8	47n
R9	470k	C9	470p
R10	12k	C10	3n9
R11	390R	C11	10n
R12	10k	C12	100n
R13	100k	C13	100n
R14	470k	C14	100uf
R15	12k	**Transistors**	
R16	390R	Q1	2N5088
R17	20k	Q2	2N5088
R18	22k	Q3	2N5088
R19	100k	Q4	2N5088
R20	470k	**Diodes**	
R21	10k	D1	1N914
R22	2k	D2	1N914
R23	1M	D3	1N914
CLR	4k7	D4	1N914
		D5	1N5817
		Pots	
		SUSTAIN	B100k
		TONE	B100k
		VOL	A100k

TRIANGLE

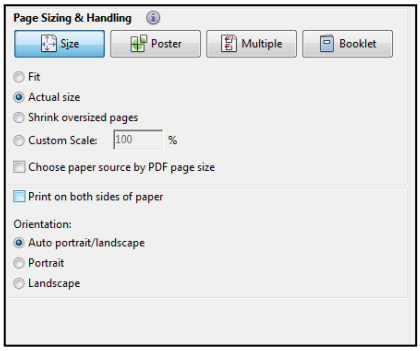
Resistors		Capacitors	
R1	3k3	C1	100n
R2	82k	C2	none
R3	390k	C3	100n
R4	22k	C4	100n
R5	820R	C5	50n
R6	1k	C6	560p
R7	8k2	C7	100n
R8	none	C8	50n
R9	390k	C9	560p
R10	12k	C10	4n7
R11	150R	C11	10n
R12	8k2	C12	100n
R13	82k	C13	100n
R14	390k	C14	100uf
R15	22k	**Transistors**	
R16	820R	Q1	2N5088
R17	39k	Q2	2N5088
R18	39k	Q3	2N5088
R19	100k	Q4	2N5088
R20	390k	**Diodes**	
R21	12k	D1	1N914
R22	2k7	D2	1N914
R23	1M	D3	1N914
CLR	4k7	D4	1N914
		D5	1N5817
		Pots	
		SUSTAIN	B100k
		TONE	B100k
		VOL	A100k

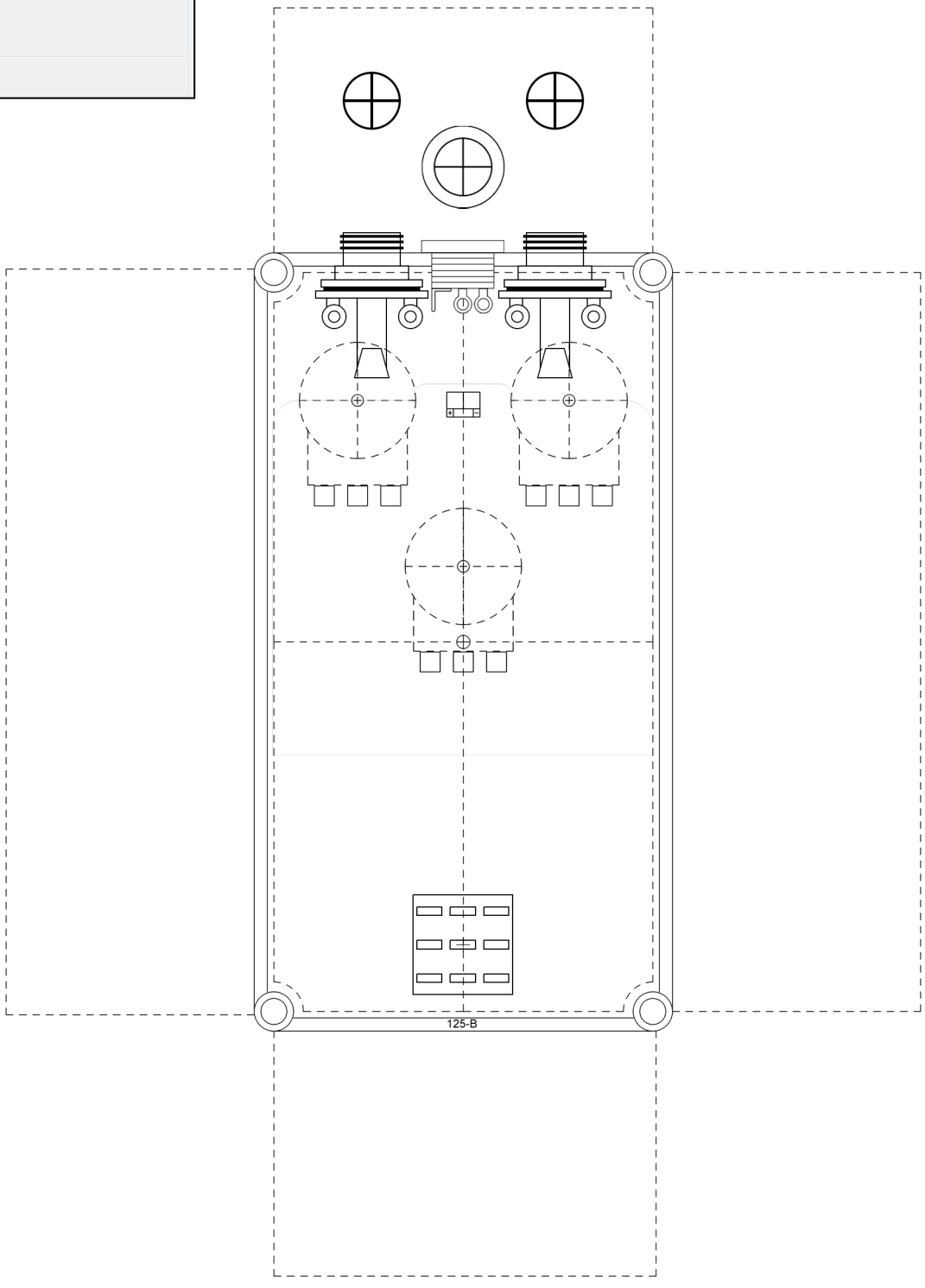
SCHEMATIC


OUT
VOLUME
GND
C13
Q4
R21
R22
R20
R19
C12
C11
TONE
R18
C10
R17
Q3
R15
R16
C8
C9
R14
D1
D2
R13
R12
C7
Q2
R10
R11
C5
C6
R9
D3
D4
R8
R7
C4
SUSTAIN
R6
C3
Q1
R4
R5
C2
R3
R2
C1
R1
R23
IN
C14
R0
LED
D5
1N5817
9V.DC
PWR1

DRILL TEMPLATE

Adobe PDF: PRINT ACTUAL SIZE





WIRING IT UP

It's good to test the effect outside of the enclosure. I do sell a tester board which is perfect for this. When your good to go, here's how to wire things up.