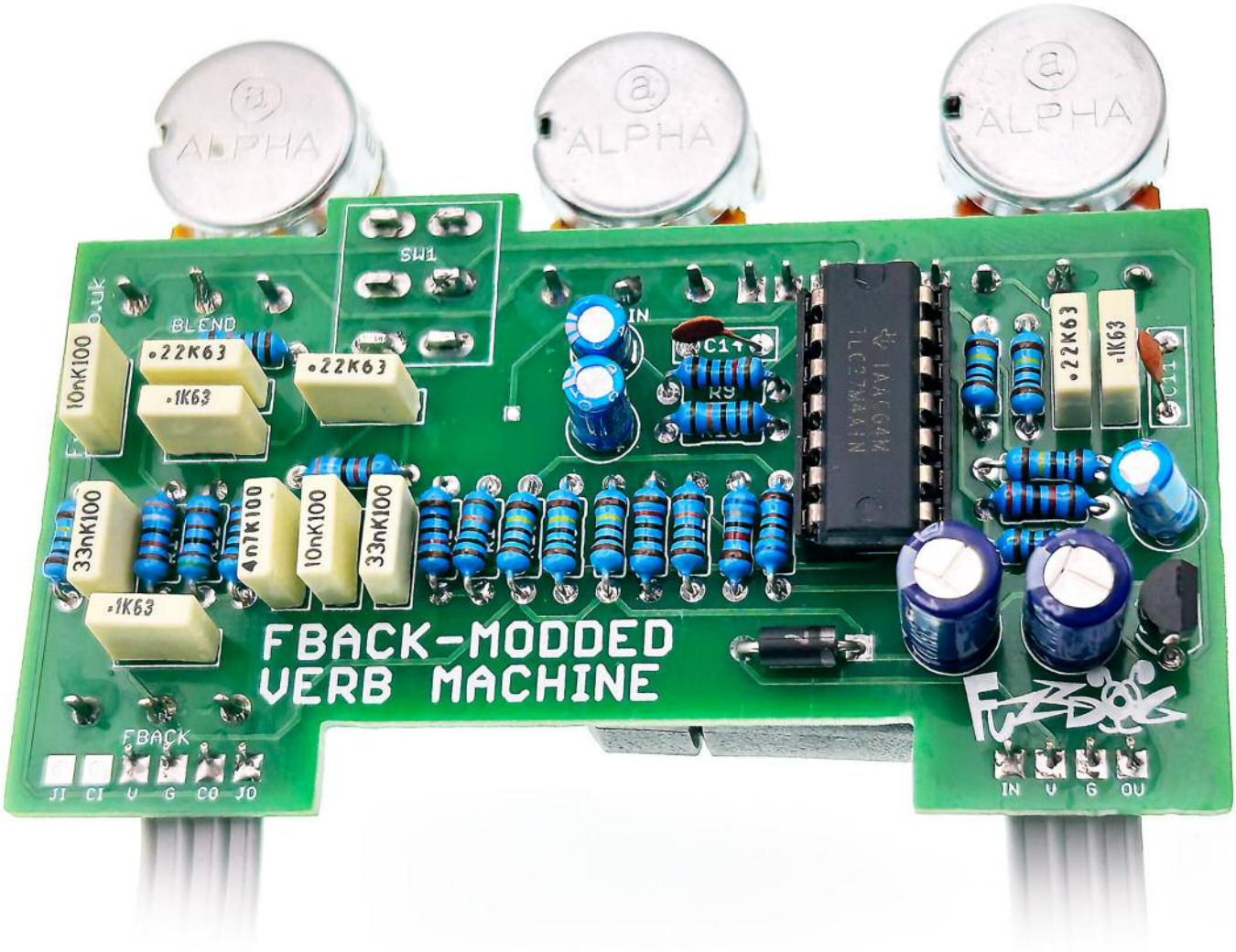
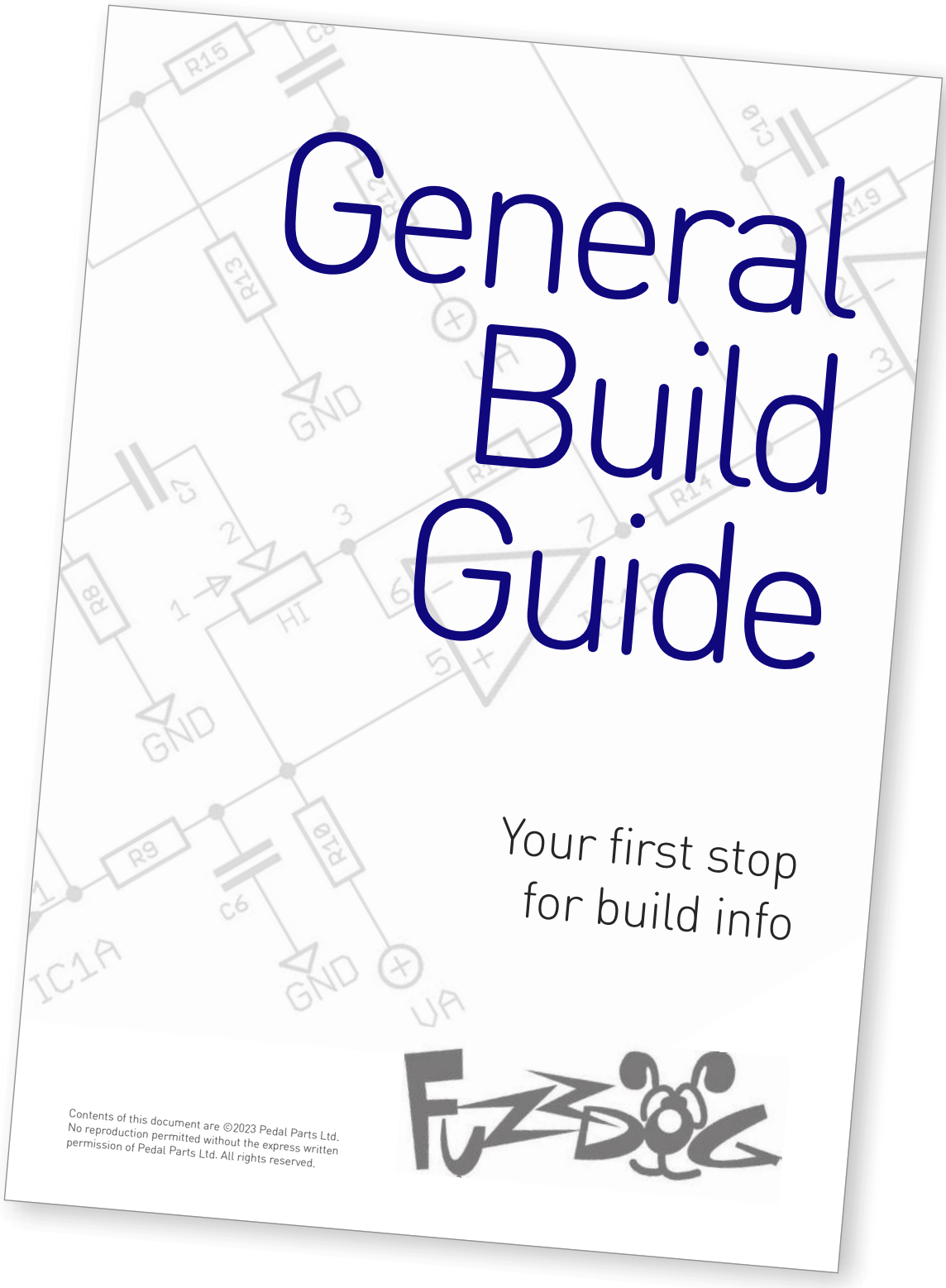


Verb Machine (Feedback Modded)

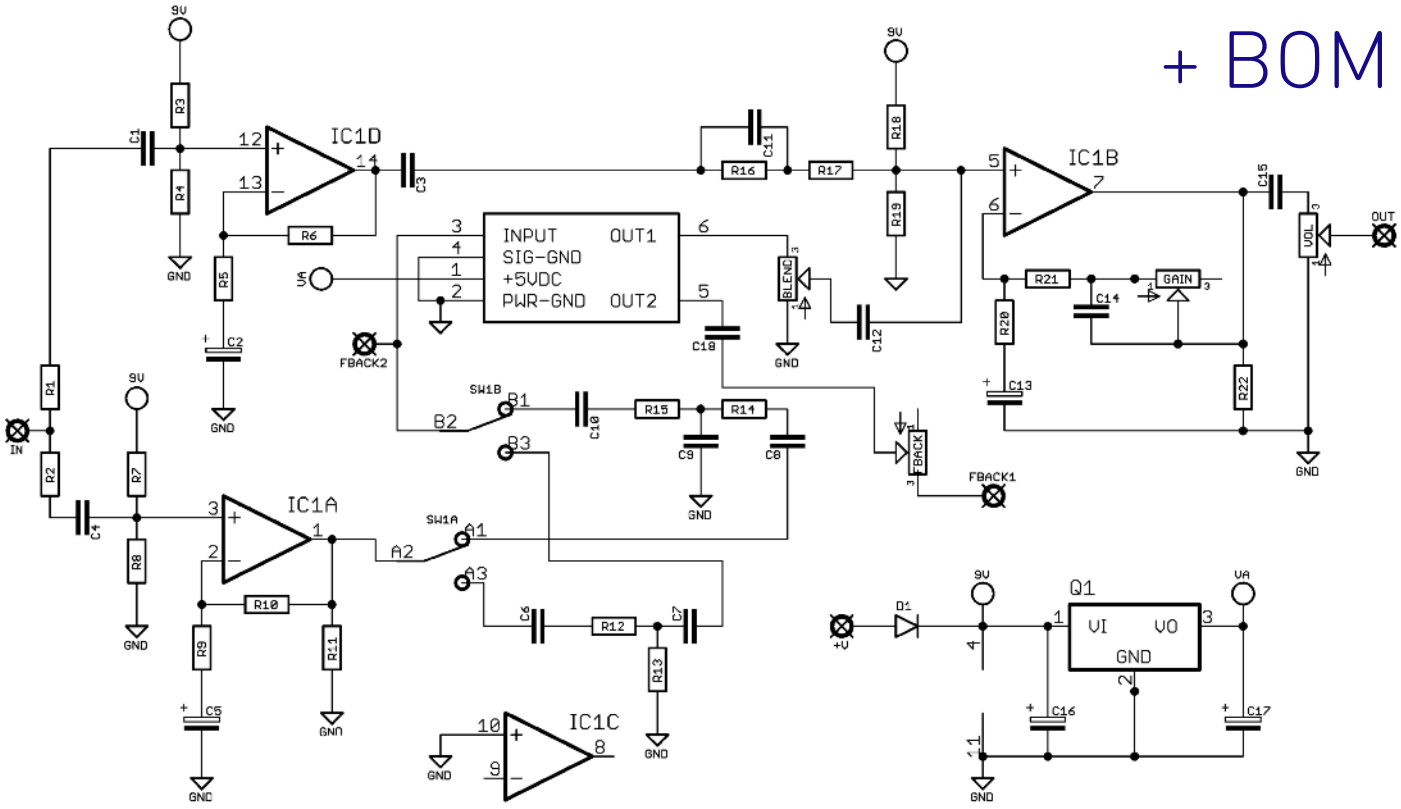
A big box of semi-controlled noise-making chaos

Before you dig in, ensure you download and read the **General Build Guide**.

It contains all the information you need for a successful outcome.



Schematic + BOM



R1	100K
R2	10K
R3	1M
R4	1M
R5	10K
R6	22K
R7	1M
R8	1M
R9	10K
R10	100K
R11	100K
R12	1-10K*
R13	1K
R14	39K
R15	39K
R16	1M
R17	6K8
R18	1M
R19	1M
R20	10K
R21	68K
R22	100K

C1	33n
C2	1u elec
C3	100n
C4	10n
C5	1u elec
C6	100n
C7	4n7
C8	220n
C9	33n
C10	220n
C11	470p
C12	10n
C13	1u elec
C14	470p
C15	220n
C16	100u elec
C17	100u elec
C18	220n‡

IC1	TLC27M4AiN**
Q1	78L05 Regulator

Reverb brick is BTDR-2H Long

D1	1N5817

BLEND	10KA
FBACK	100KC
GAIN	1MC
VOL***	100KA

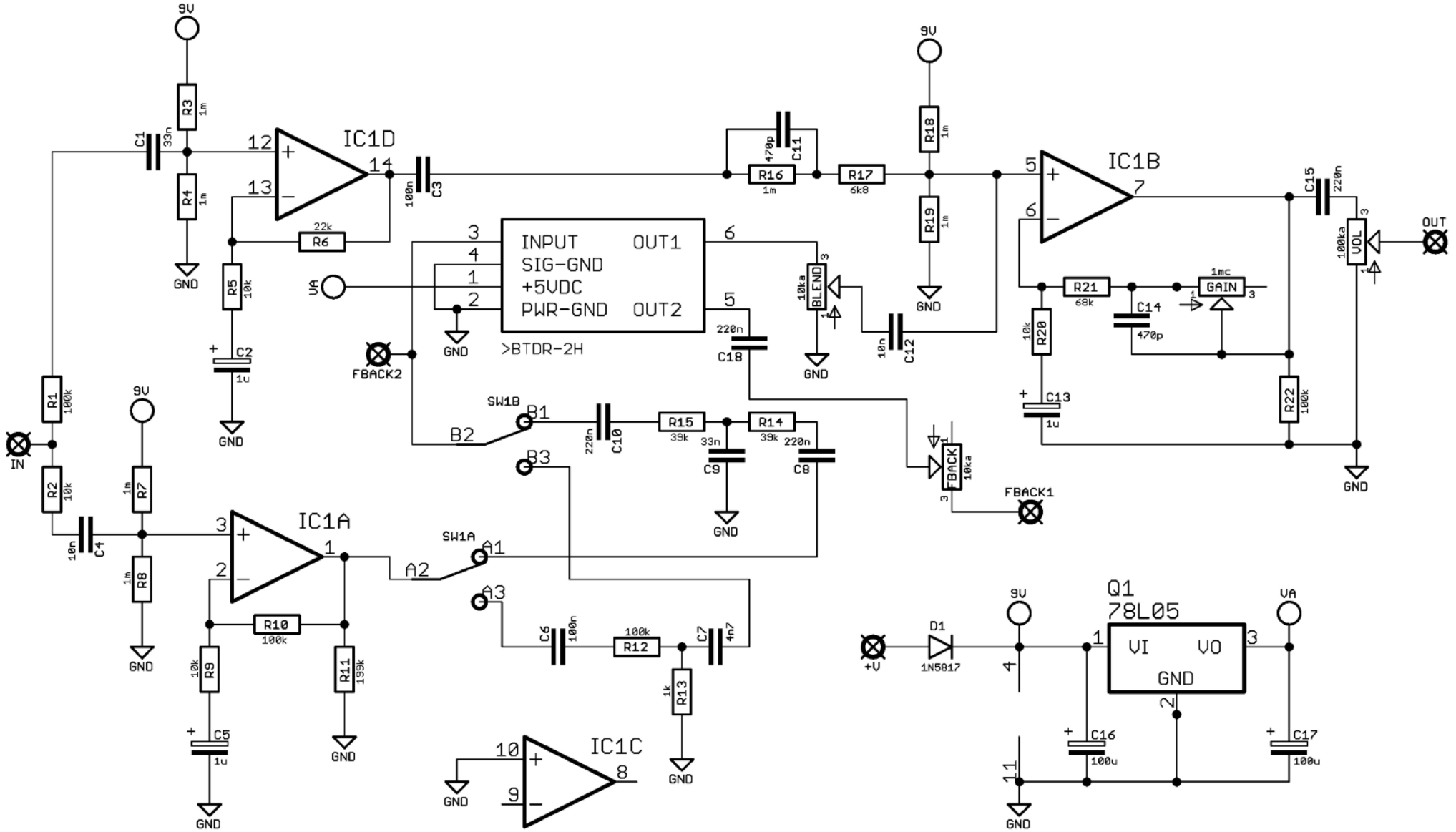
SW1	DPDT ON-ON

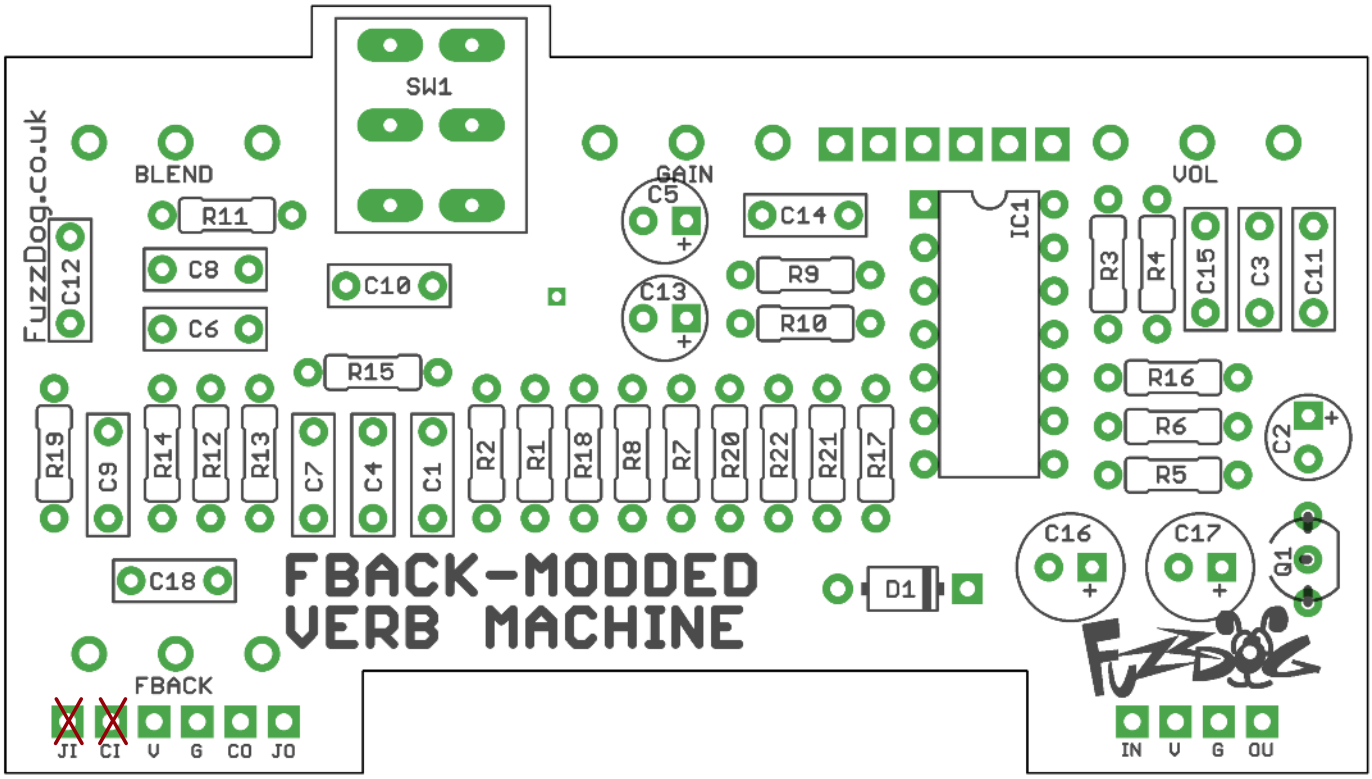
*R12 is listed as 100K on the trace schematic. The Sunshine tone setting sounds wrong with this value. Something between 1-10K is best - we recommend 4K7. Smaller = brighter.

**Other quad op-amps will work just fine.

***We've connected the volume in a more sensible way than the original.

‡Use a smaller value cap if you want to limit the feedback frequencies


9V
R3
1m
C1
33n
IC1D
12
13
14
R4
1m
GND
22k
R6
R5
10k
C2
1u
100n
C3
VA
3
4
1
2
INPUT
SIG-GND
+5VDC
PWR-GND
OUT1
OUT2
>BTDR-2H
6
5
220n
C18
FBACK2
SW1B
B1
B2
B3
220n
C10
R15
39k
33n
C9
R14
39k
220n
C8
R16
1m
470p
C11
R17
6k8
R18
1m
R19
1m
10ka
BLEND
10n
C12
FBACK
10ka
FBACK1
IC1B
5
6
7
R21
68k
C14
470p
1mc
GAIN
10k
R20
C13
1u
R22
100k
C15
220n
100ka
VOL
OUT
IN
R1
100k
R2
10k
10n
C4
1m
R7
1m
R8
IC1A
3
2
1
SW1A
A1
A2
A3
R10
100k
10k
R9
C5
1u
R11
195k
C6
100n
100k
R12
C7
4n7
1k
R13
IC1C
10
9
8
D1
1N5817
+V
Q1
78L05
VI
VO
GND
C16
100u
C17
100u
11



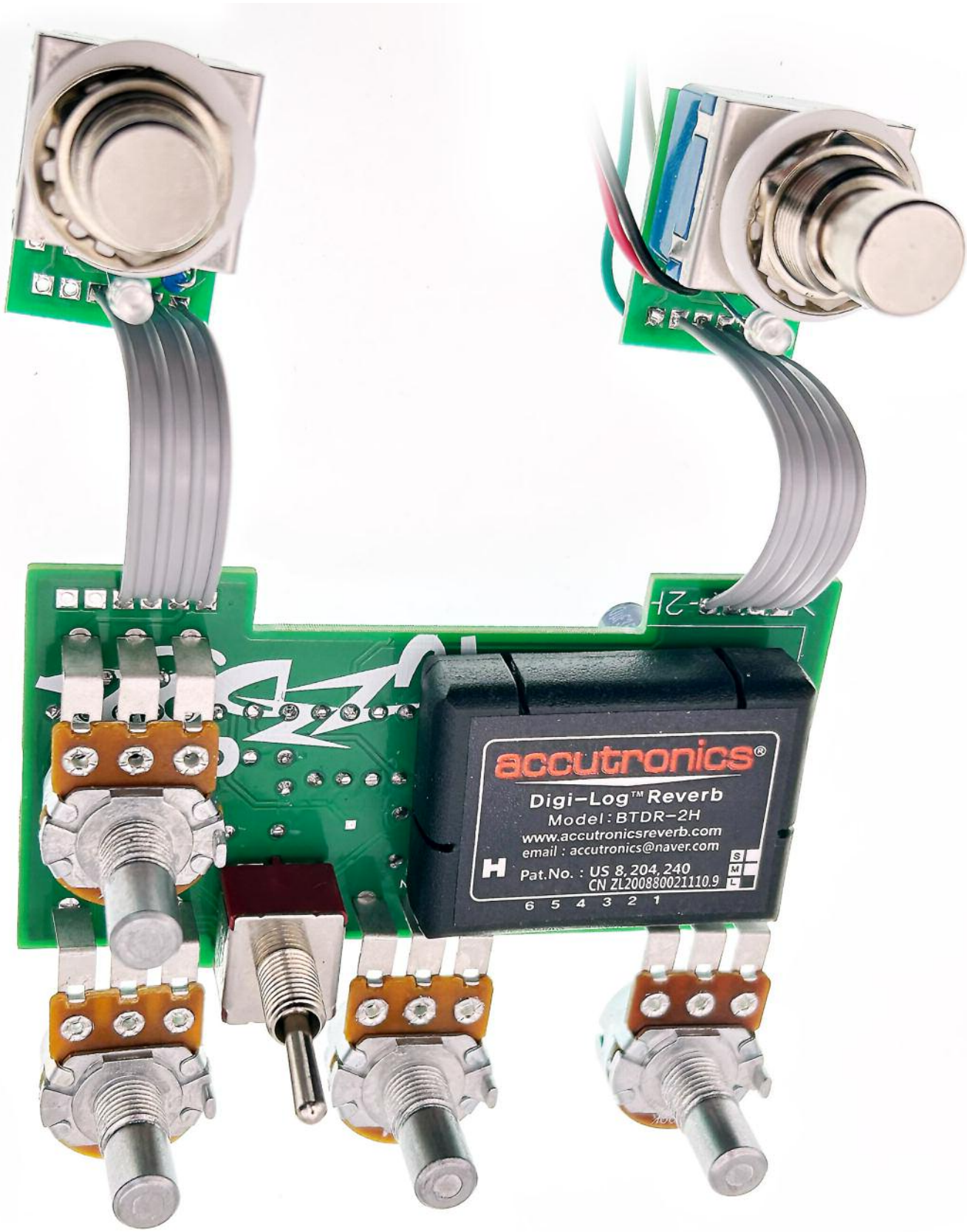
Snap the small metal tag off the pots so they can be mounted flush in the box.

You should solder all other board-mounted components before you solder the pots.

Once they're in place you'll have no access to much of the board.

Looking at the component side of the PCB, the right footswitch pads are your main bypass, the left are your oscillation switch.

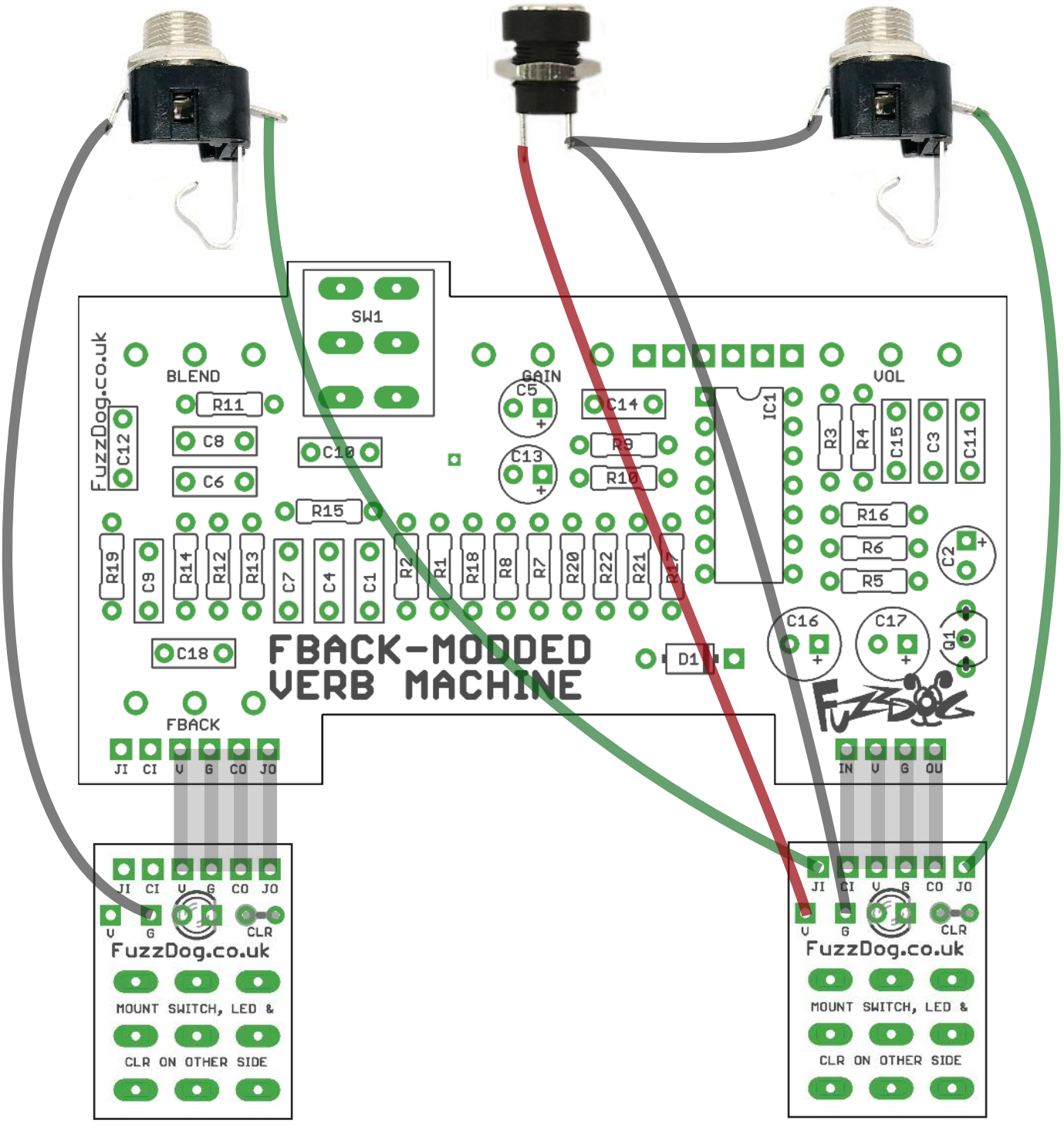
The JI and CI pads are not connected on the Feedback switch board. They're only included so we could utilise our existing switch boards for this build.


accutronics®
Digi-Log™ Reverb
Model : BTDR-2H
www.accutronicsreverb.com
email : accutronics@naver.com
H
Pat.No. : US 8,204,240
CN ZL200880021110.9
S
M
L
6 5 4 3 2 1

Wiring

with latching 3PDT feedback switch including LED indicator

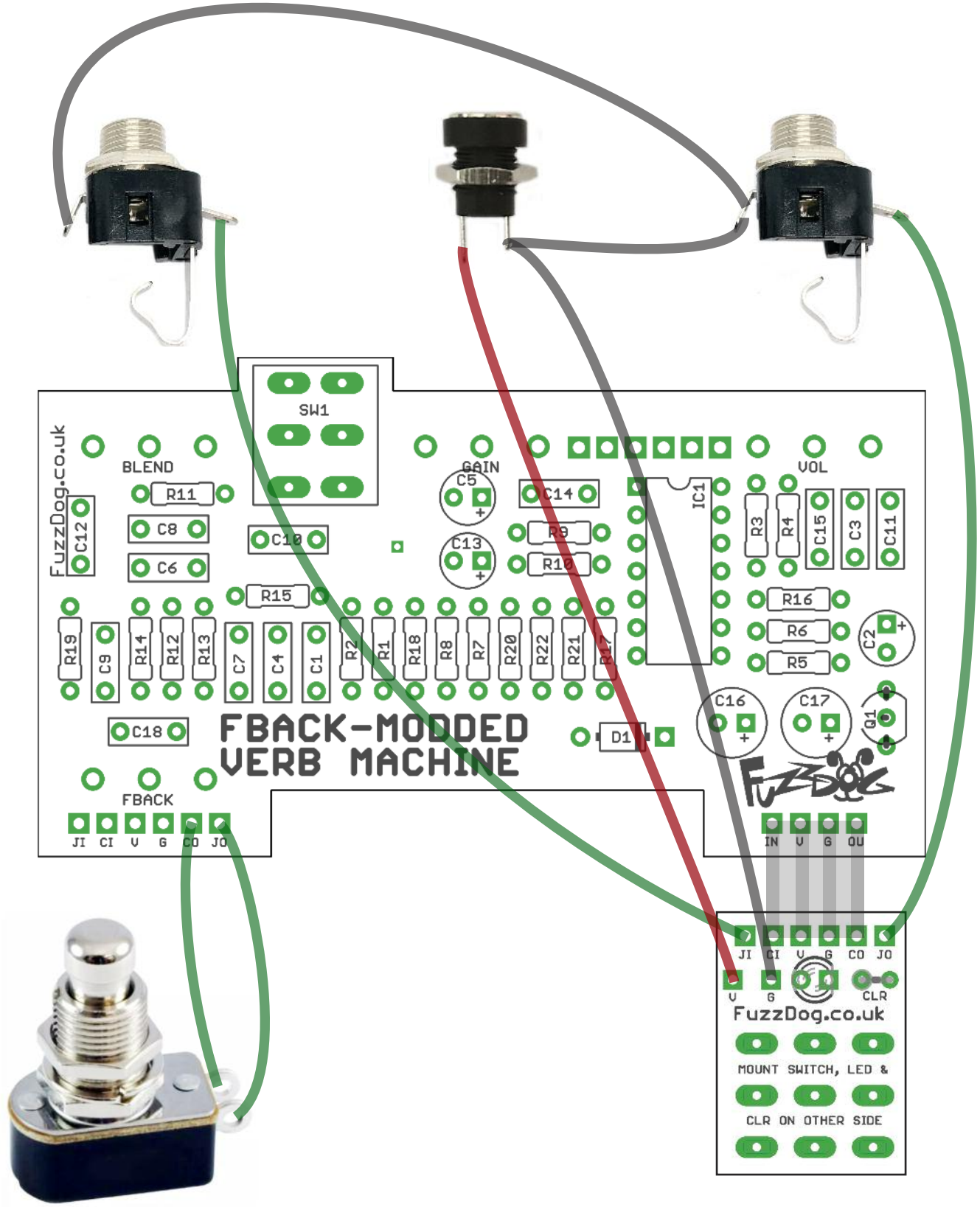
When the Feedback footswitch is engaged, the CO pad connects to the JO pad, completing the circuit.
Daisy-chain the grounds or utilise the spare G pad on the Feedback daughterboard.



Wiring

with momentary SPDT feedback switch, no LED indicator

No need for an LED - you know when your foot is on the switch...



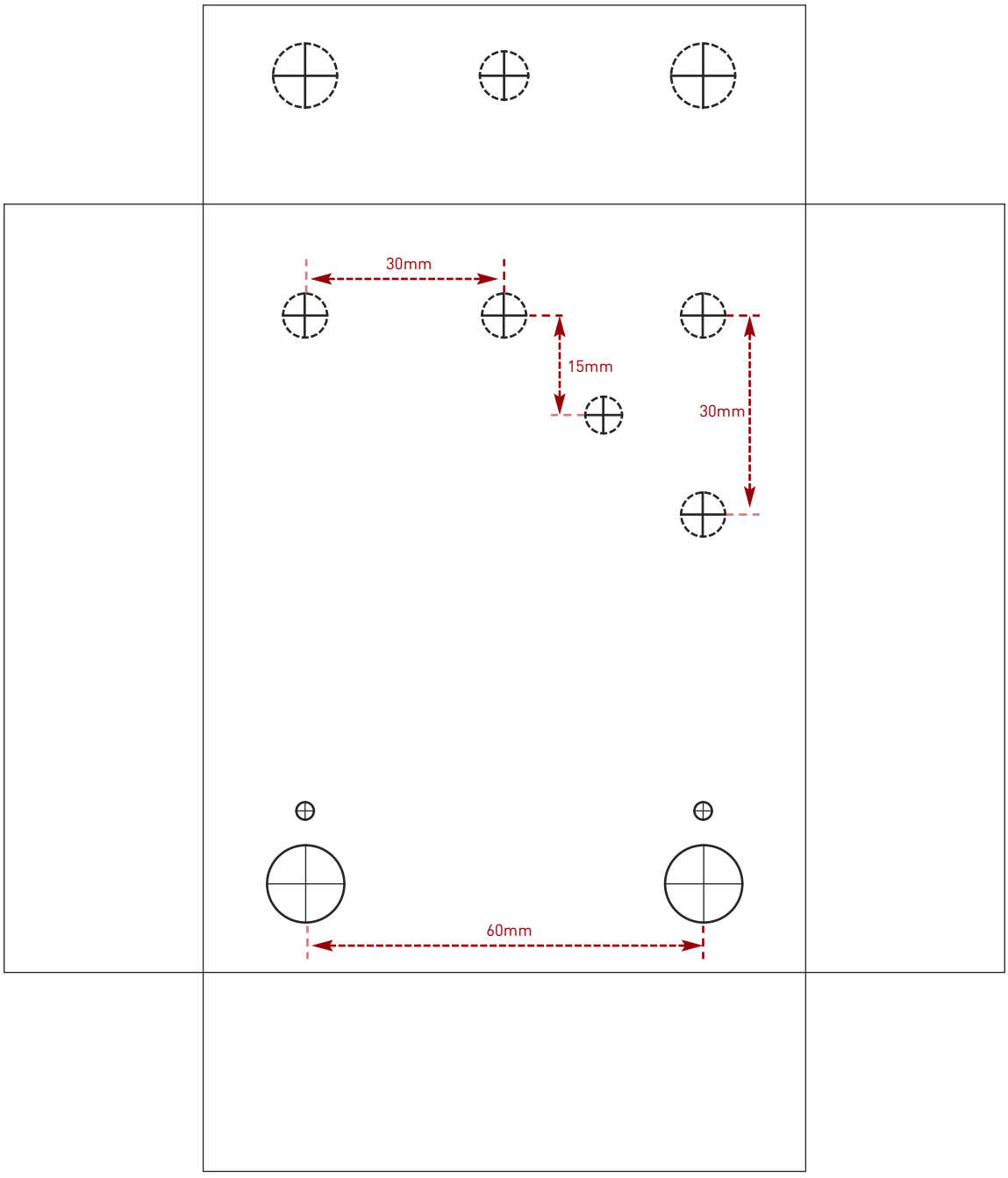
Drilling template

Hammond 1590BB

Drill sizes listed are minimum.
It's a good idea to add 1mm to anything mounted on the PCB that'll poke through the front of the enclosure.

Drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm
Toggle switches	6mm
Rotary switches	10mm



This template is a rough guide only. You should ensure correct marking of your enclosure before drilling. You use this template at your own risk.
Pedal Parts Ltd can accept no responsibility for incorrect drilling of enclosures.

FuzzDog.co.uk