

Sonic Churn

This modified SD-9 is a
creamy smooth beauty

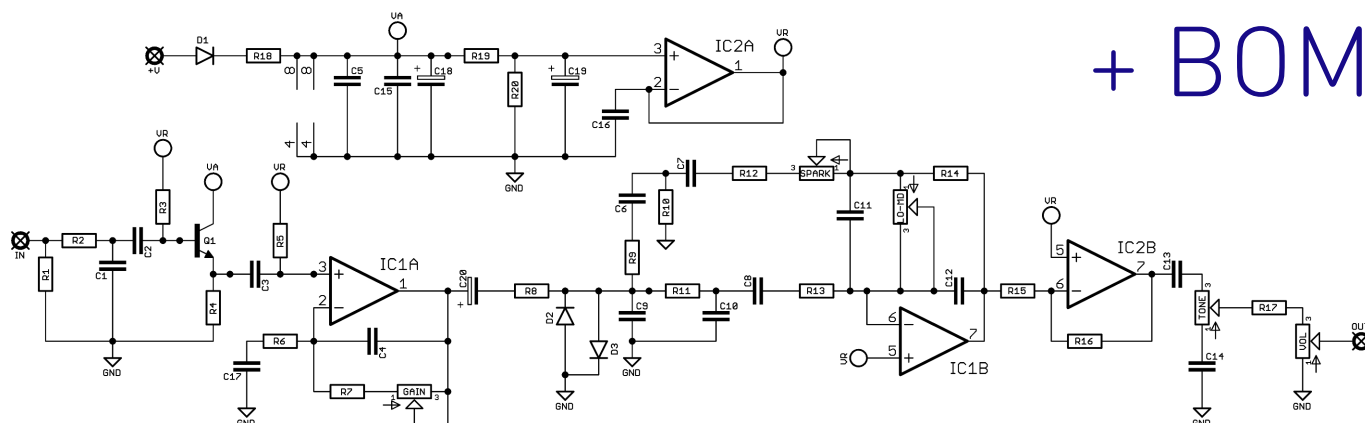


Before you dig in, ensure you download and read the **General Build Guide**.

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



Schematic + BOM

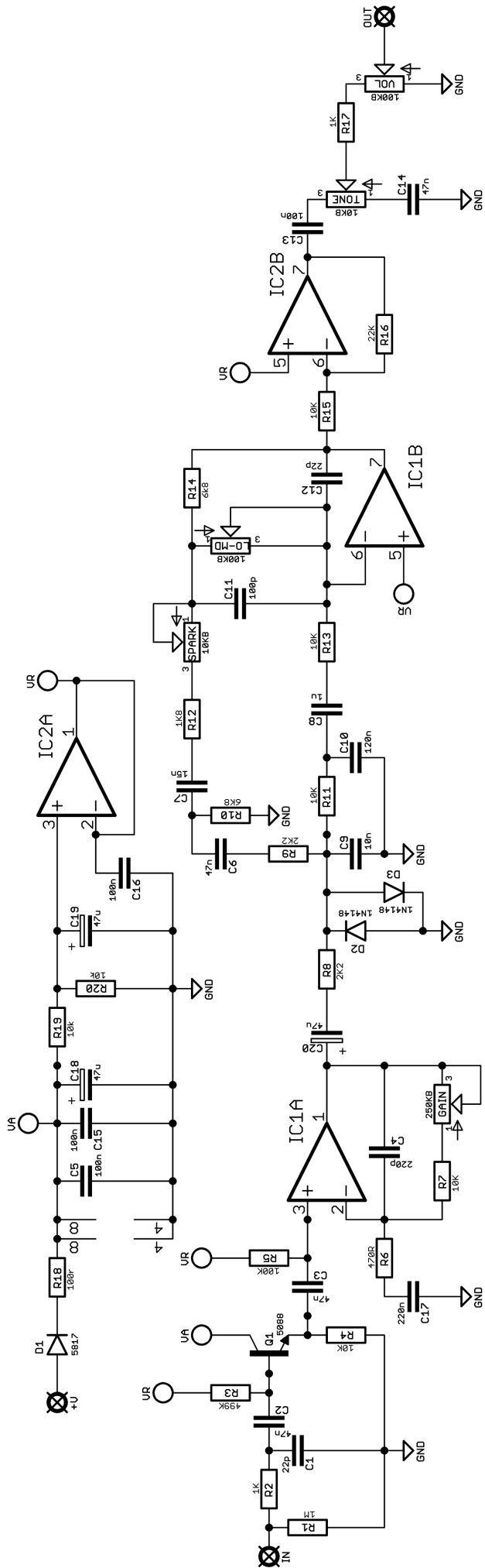


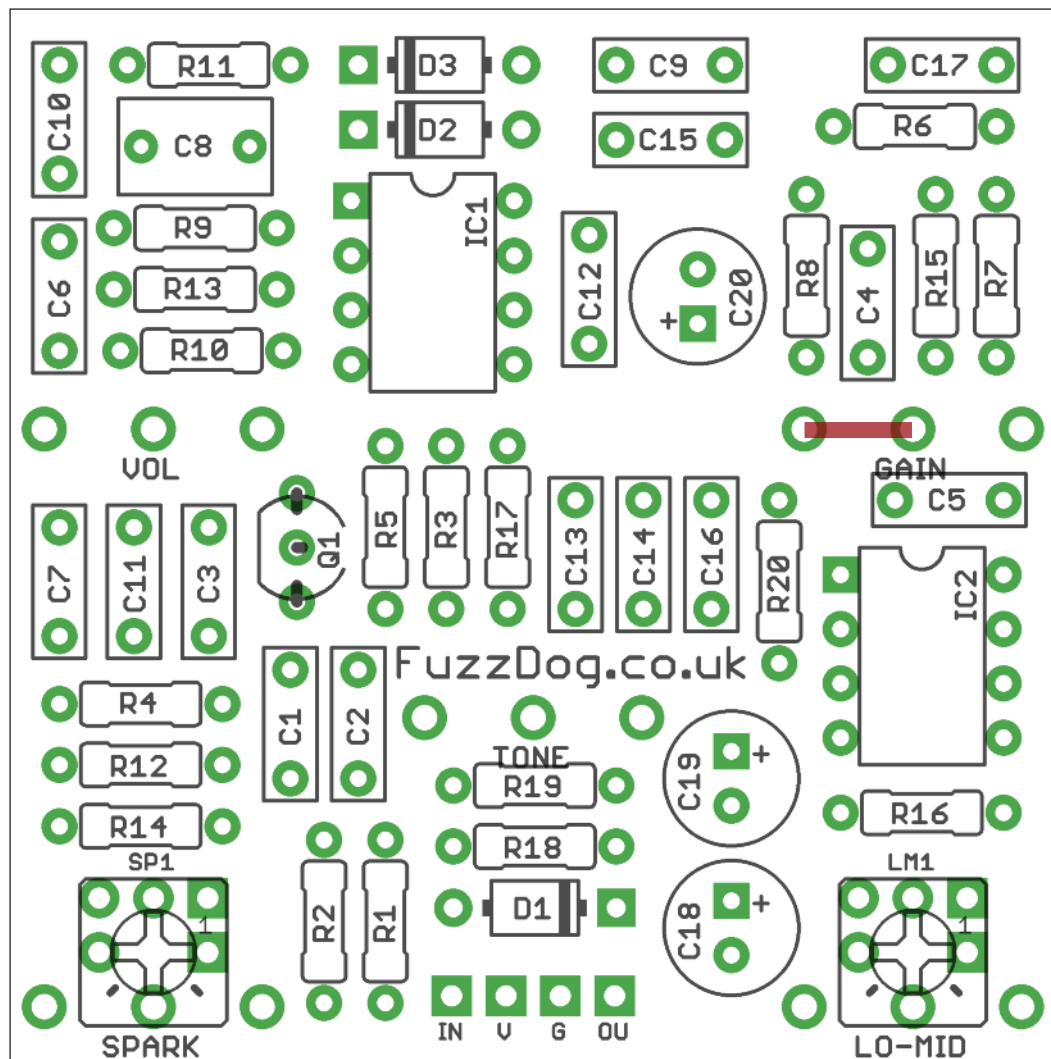
| | | | | | |
|-----|-------|-----|----------|--------|-----------------|
| R1 | 1M | C1 | 22p | D1 | 1N5817 |
| R2 | 1K | C2 | 47n | D2-3 | 1N4148 |
| R3 | 499K* | C3 | 47n | Q1 | 2N5088 |
| R4 | 10K | C4 | 220p | IC1 | OPA2134 |
| R5 | 100K | C5 | 100n | IC2 | 4558 |
| R6 | 470R | C6 | 47n | GAIN | 250KB** |
| R7 | 10K | C7 | 15n | TONE | 10KB |
| R8 | 2K2 | C8 | 1u | VOL | 100KB |
| R9 | 2K2 | C9 | 10n | LO MID | 100K trimmer*** |
| R10 | 6K8 | C10 | 120n | SPARK | 10K trimmer*** |
| R11 | 10K | C11 | 100p | | |
| R12 | 1K8 | C12 | 22p | | |
| R13 | 10K | C13 | 100n | | |
| R14 | 6K8 | C14 | 47n | | |
| R15 | 10K | C15 | 100n | | |
| R16 | 22K | C16 | 100n | | |
| R17 | 1K | C17 | 220n | | |
| R18 | 100R | C18 | 47u elec | | |
| R19 | 10K | C19 | 47u elec | | |
| R20 | 10K | C20 | 47u elec | | |

*Get outa here. 510K will be absolutely fine.

**Gain pot requires a jumper. See page 5.

***These are trimmers on the original, but we've added spots so you can use pots if you prefer. The really are set-and-forget though. Use 10KB and 100KB if you must.





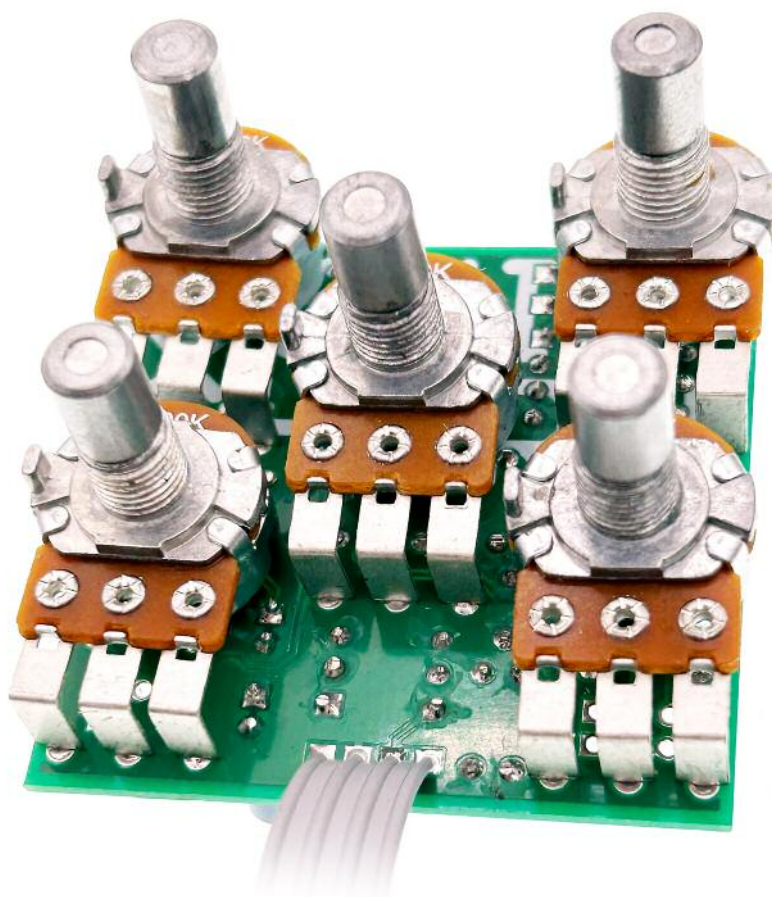
Snap the small metal tags off the pots so they can be mounted flush in the box.

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.

GAIN POT JUMPER

A little oopsie when doing the layout requires a jumper, shown in red above.



Drilling template

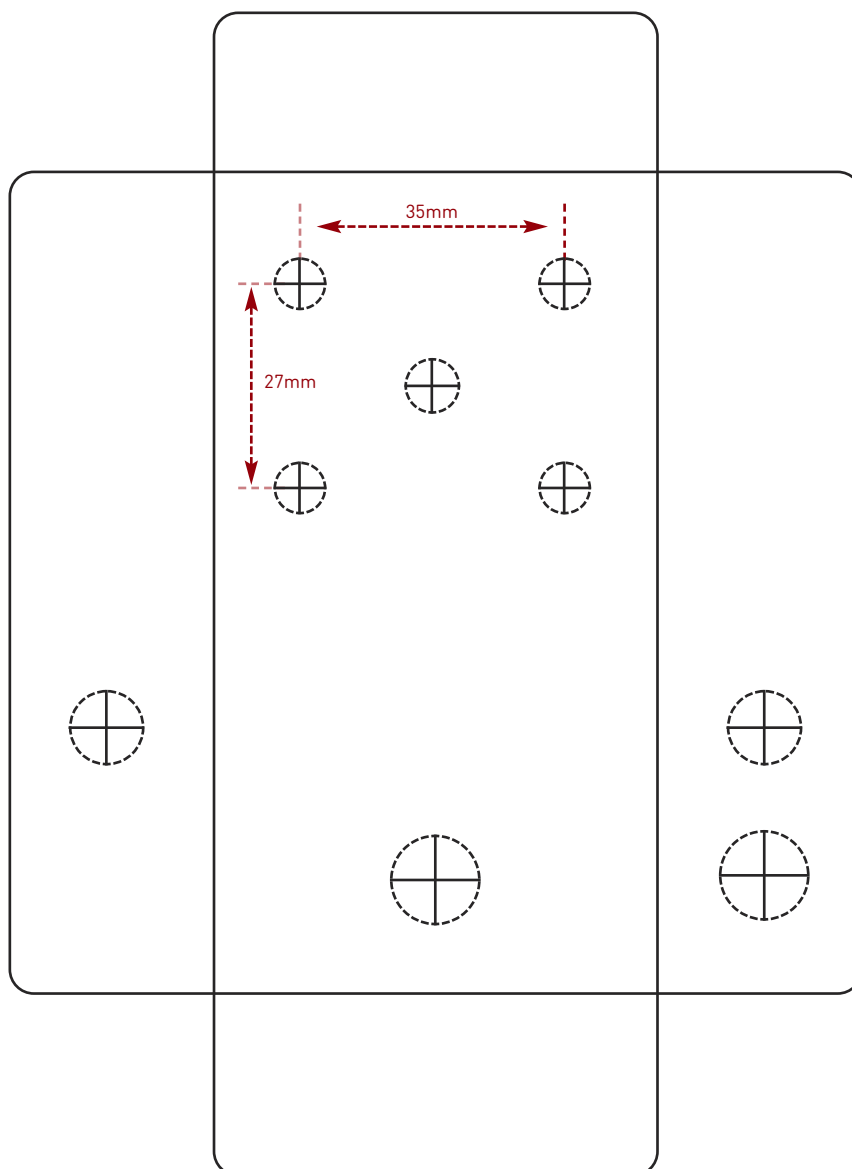
Hammond 1590B - 60 x 111 x 31mm

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.

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