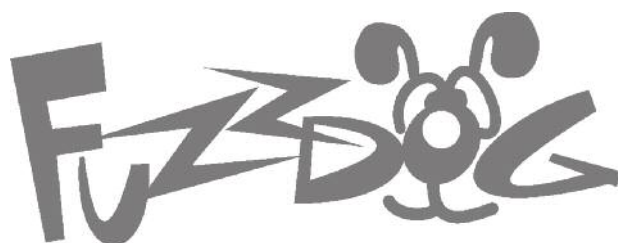


Graphic Fuzz

Standard power implementation
of the ESR classic fuzz monster

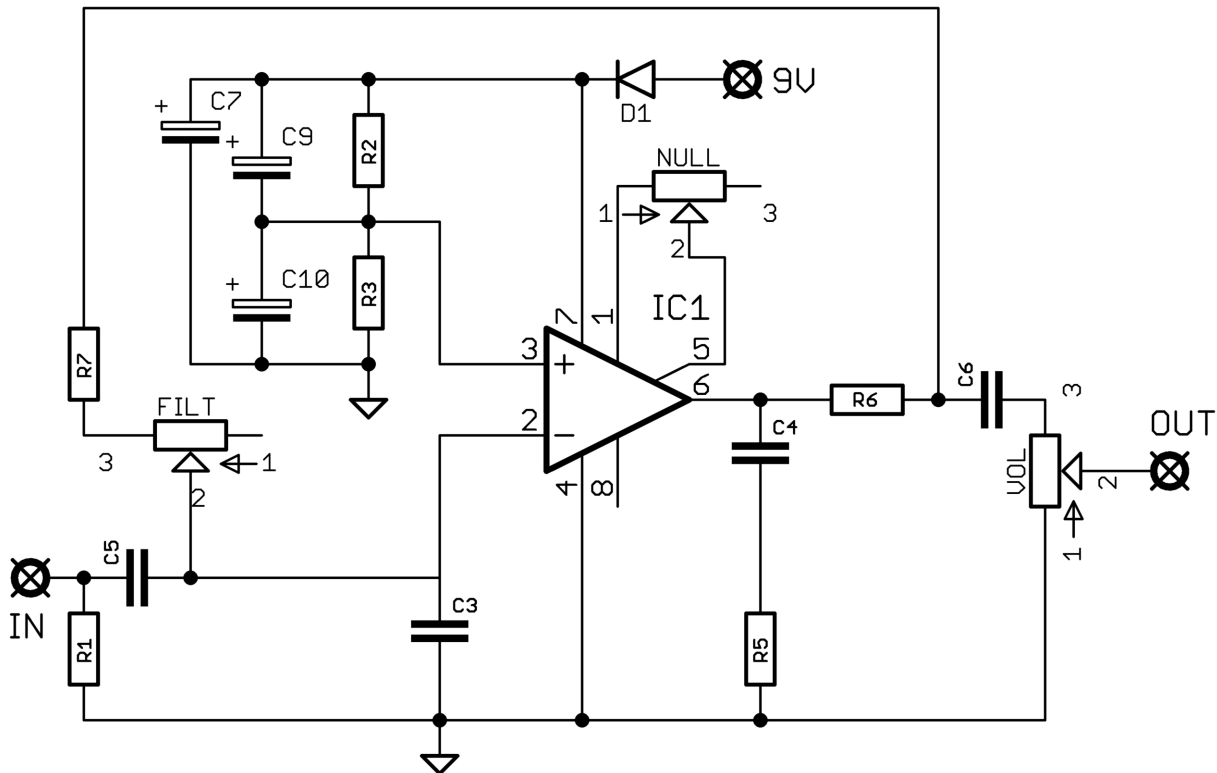


Before you dig in, ensure you download and read the **General Build Guide**.

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



Schematic + BOM



R1	1M
R2	10K
R3	10K
R4	3K3
R5	220R
R6	10K
R7	10K*

C3	100n
C4	100n
C5	1u
C6	1u
C7	47u elec
C9	.47u elec**
C10	.47u elec**

D1	1N5817
IC1	LM741
IC2	LM741*

FILT	1MB
VOL	10KA
NULL	10KB*

The original circuit has far fewer parts than shown above, and uses a troublesome power arrangement.

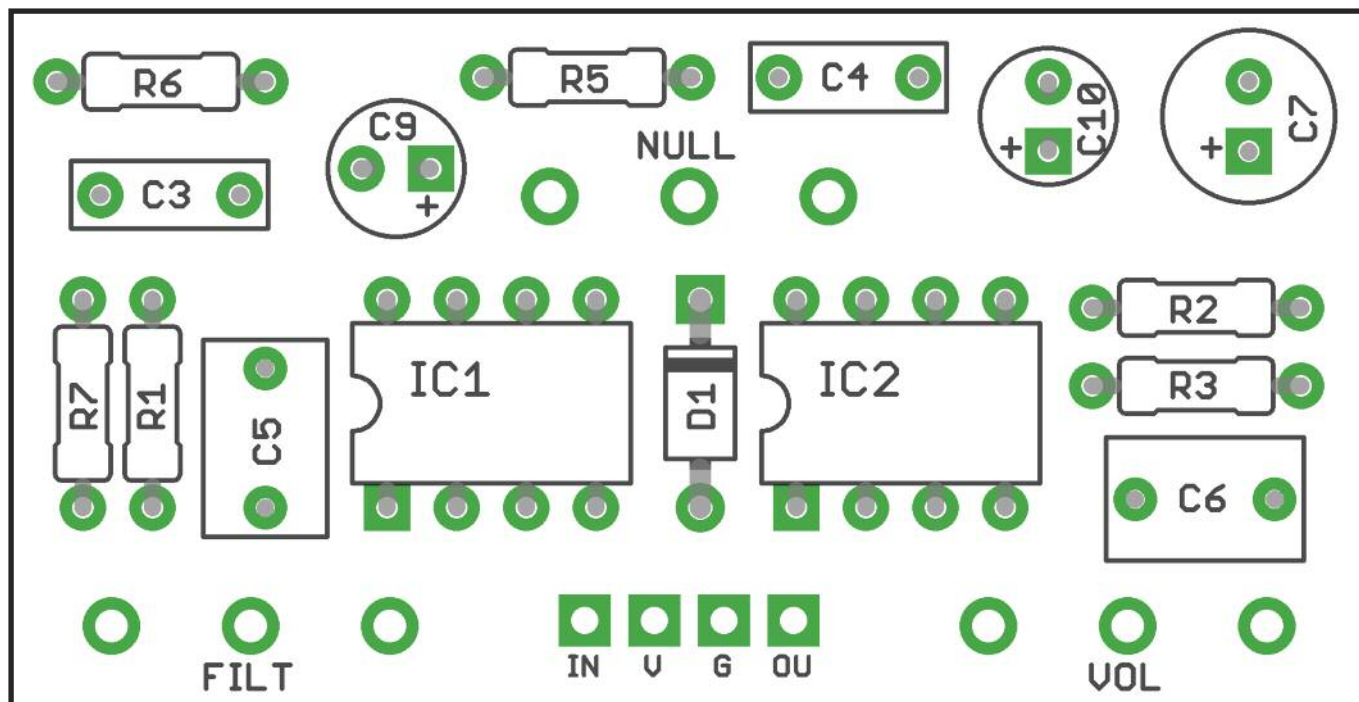
This version has been adjusted for standard power, and adds some basic housekeeping such as input and output caps and power filtering. It's also notorious for howling and squealing when the filter control is turned CW. This is part of the charm and uniqueness of the pedal, but we're giving you the option to mitigate this in several different ways.

*Add R1 so the filter control is never fully open. Use whatever value you like - we found 10K to be sufficient to cut out the most extreme squeal. If not using this, jumper it with wire.

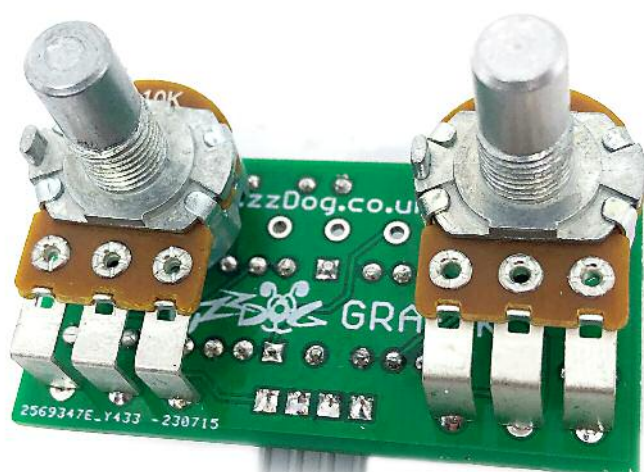
You can add a NULL control pot which goes some way to reducing the squeal. If you don't like it, take it out! No need for any jumpers if you don't want to add it.

Go all-out and add IC2. Stacking the op-amps seems to also work well in taming the beast. Though not shown on the schematic, the pins of both ICs are directly connected to each other.

**Changing the value of C9-10 changes the frequency of the squealing. Original uses 100n, but probably because they were cheap. Higher value, lower frequency. We like 0.47uf.



PCB layout ©2023 Pedal Parts Ltd.



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. Make sure your pots all line up nicely.

The power and signal pads on the PCB conform to the FuzzDog Direct Connection format, so can be paired with the appropriate daughterboard for quick and easy offboard wiring. Check the separate daughterboard document for details.

Be very careful when soldering the diode. They're very sensitive to heat. You should use some kind of heat sink (crocodile clip or reverse action tweezers) on each leg as you solder them. Keep exposure to heat to a minimum (under 2 seconds). The same goes for the IC if you aren't using a socket.



Drilling template

Hammond 1590B

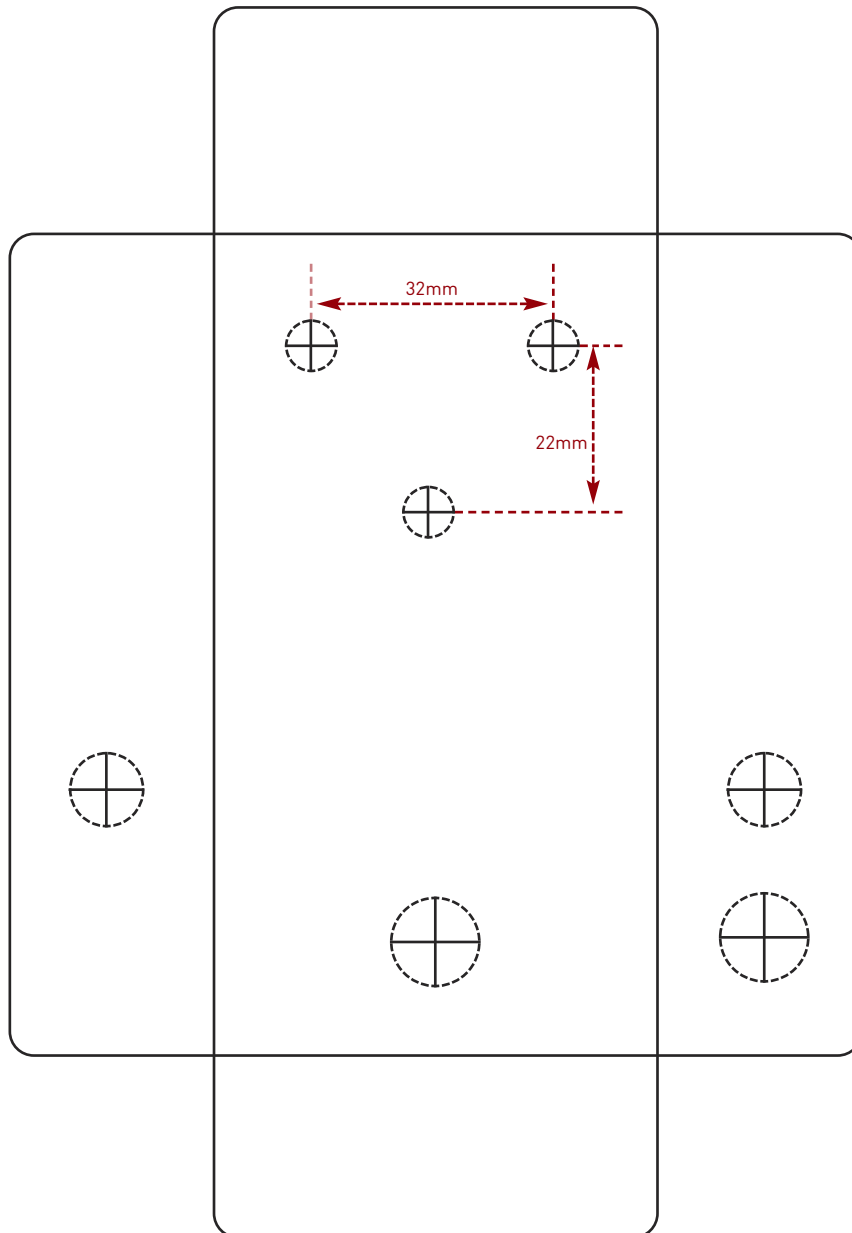
60 x 111 x 31mm

Recommended drill sizes:

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

It's a good idea to drill the pot and toggle switch holes 1mm bigger if you're board-mounting them.

Wiggle room = good!



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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