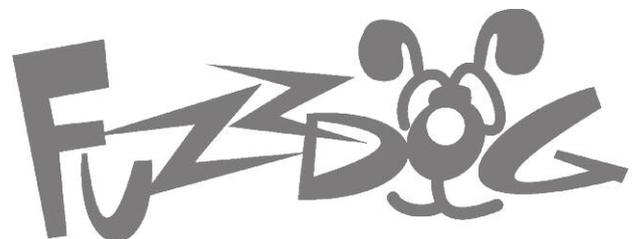
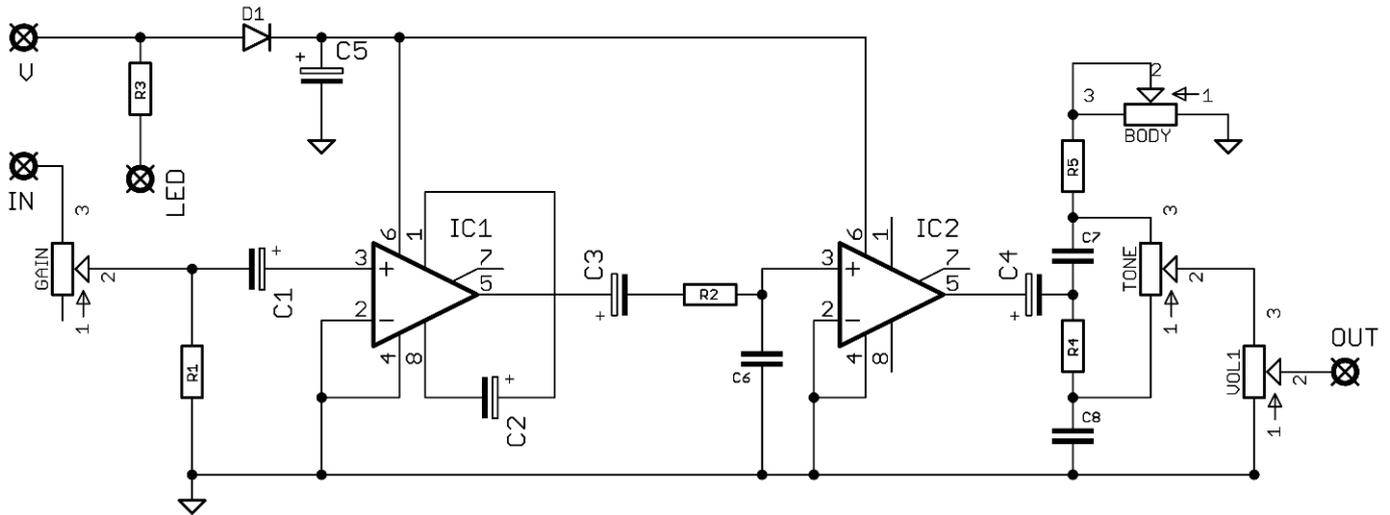


Total Sonic Destruction

Sunny-T + AMZ = Sonic Glee



Schematic + BOM



SUNNY-T

R1	1M
R2	68K
R3	CLR (2K2)
C1	10u elec
C2	10u elec
C3	1u elec
C4	1u elec
C5	100u elec
C6	4n7

AMZ V1

R4	39K
R5	3K3
C7	10n
C8	10n
BODY	25KB
TONE	100KB

AMZ V2

R4	470K
R5	3K3
C7	15n
C8	1n5
BODY	25KB
TONE	250KA

IC1-2 LM386-N1*

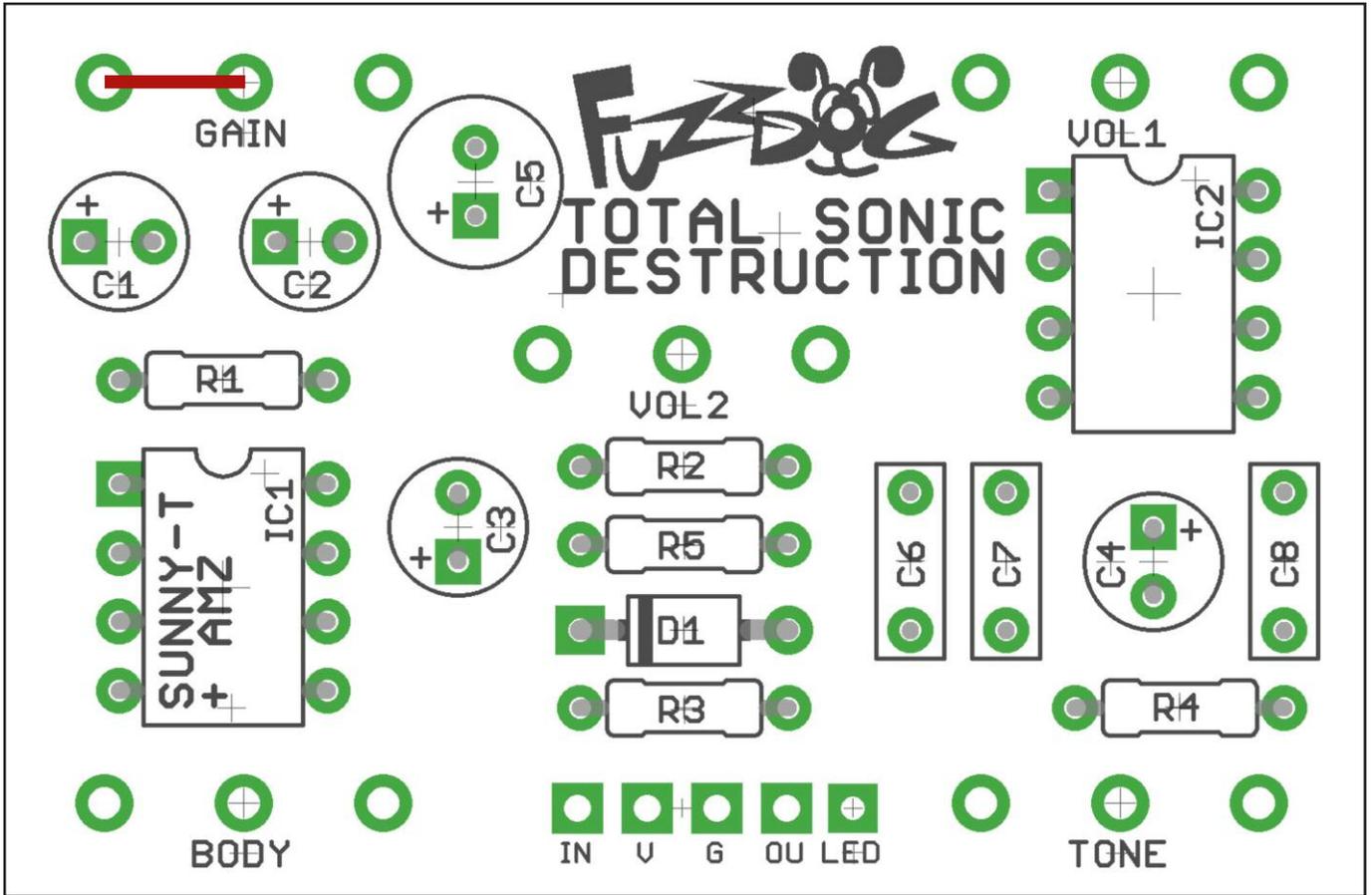
D1 1N4001

VOL 100KA

GAIN 1MC**

*You can use LM386 with higher ratings (N3, N4) if you prefer. This will give you less distortion, and a much more open sound. That's not what this circuit is about though, so we recommend sticking with N1.

**The original circuit only has a Volume control, so our Gain control is entirely optional. It basically replicates the volume control of your guitar, limiting the input signal. If you aren't using a gain control you must jumper pads 2 and 3 of GAIN - see next page. There are extra pads so you can have a centered volume control if not using the gain pot.



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). Same goes for the ICs if you aren't using sockets.

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

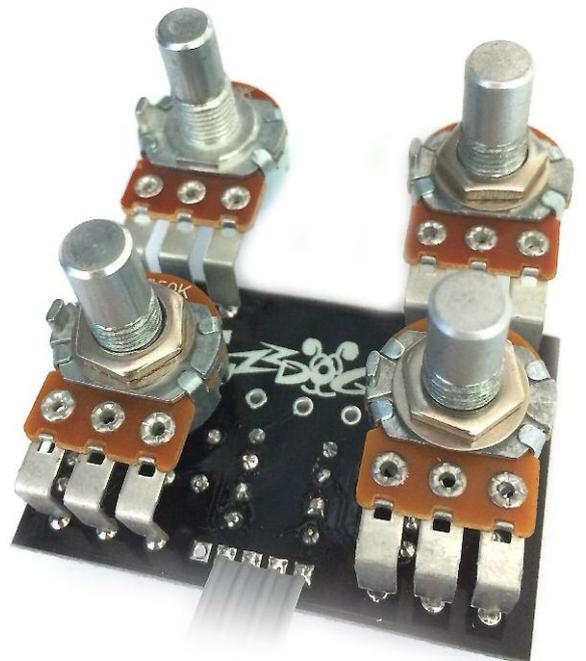
Positive (anode) legs of the electrolytic caps go to the square pads. C5 can be placed flat to save on height - see the cover image.

Negative (cathode) legs of the diode goes to the square pad.

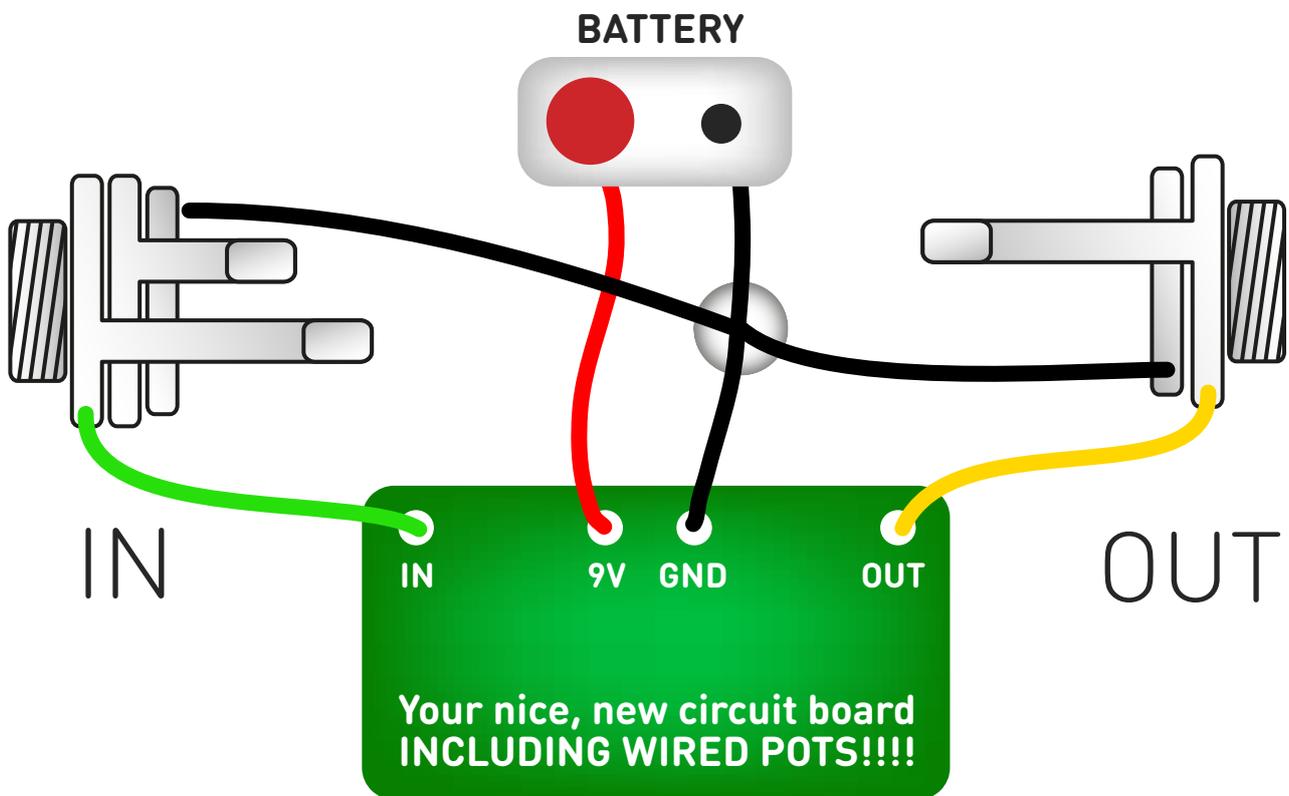
If not using a GAIN pot jumper the pads as shown in red above.

You can use EITHER VOL1 or VOL2 depending on how you want your layout.

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 best way to do that is to solder a single pin of each pot in place then melt and adjust if necessary before soldering in the other two pins. If your pots don't have protective plastic jackets ensure you leave a decent gap between the pot body and the PCB otherwise you risk shorting out the circuit.



Test the board!



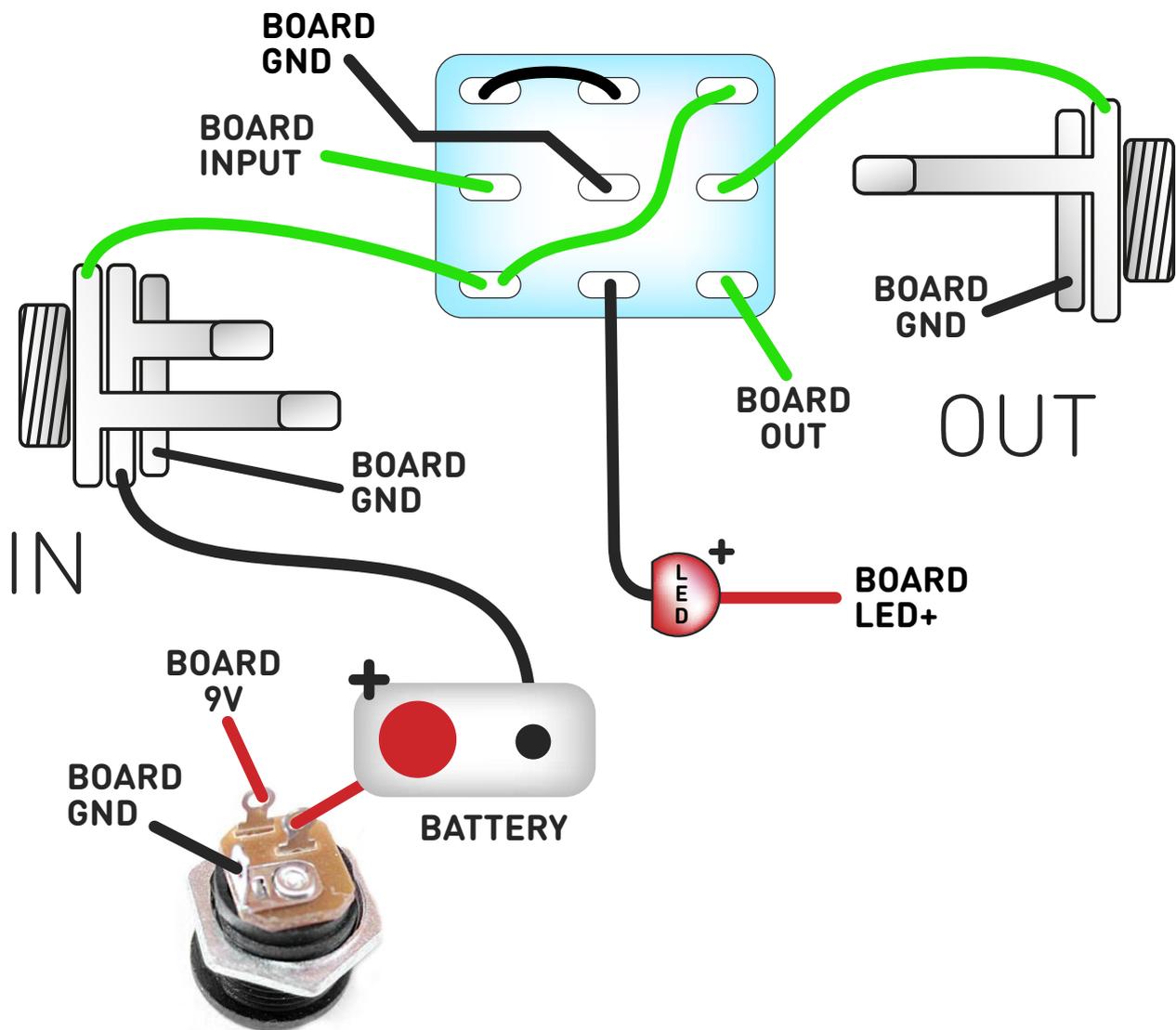
UNDER NO CIRCUMSTANCES will troubleshooting help be offered if you have skipped this stage. No exceptions.

Once you've finished the circuit it makes sense to test it before starting on the switch and LED wiring. It'll cut down troubleshooting time in the long run. If the circuit works at this stage, but it doesn't once you wire up the switch - guess what? You've probably made a mistake with the switch.

Solder some nice, long lengths of wire to the board connections for 9V, GND, IN and OUT. Connect IN and OUT to the jacks as shown. Connect all the GNDs together (twist them up and add a small amount of solder to tack it). Connect the battery + lead to the 9V wire, same method. Plug in. Go!

If it works, crack on and do your switch wiring. If not... aw man. At least you know the problem is with the circuit. Find out why, get it working, THEN worry about the switch etc.

Wire it up (if using a daughterboard please refer to the relevant document)



Wiring shown above will disconnect the battery when you remove the jack plug from the input, and also when a DC plug is inserted.

The Board GND connections don't all have to directly attach to the board. You can run a couple of wires from the DC connector, one to the board, another to the IN jack, then daisy chain that over to the OUT jack.

It doesn't matter how they all connect, as long as they do.

This circuit is standard, Negative GND. Your power supply should be Tip Negative / Sleeve Positive. That's the same as your standard pedals (Boss etc), and you can safely daisy-chain your supply to this pedal.

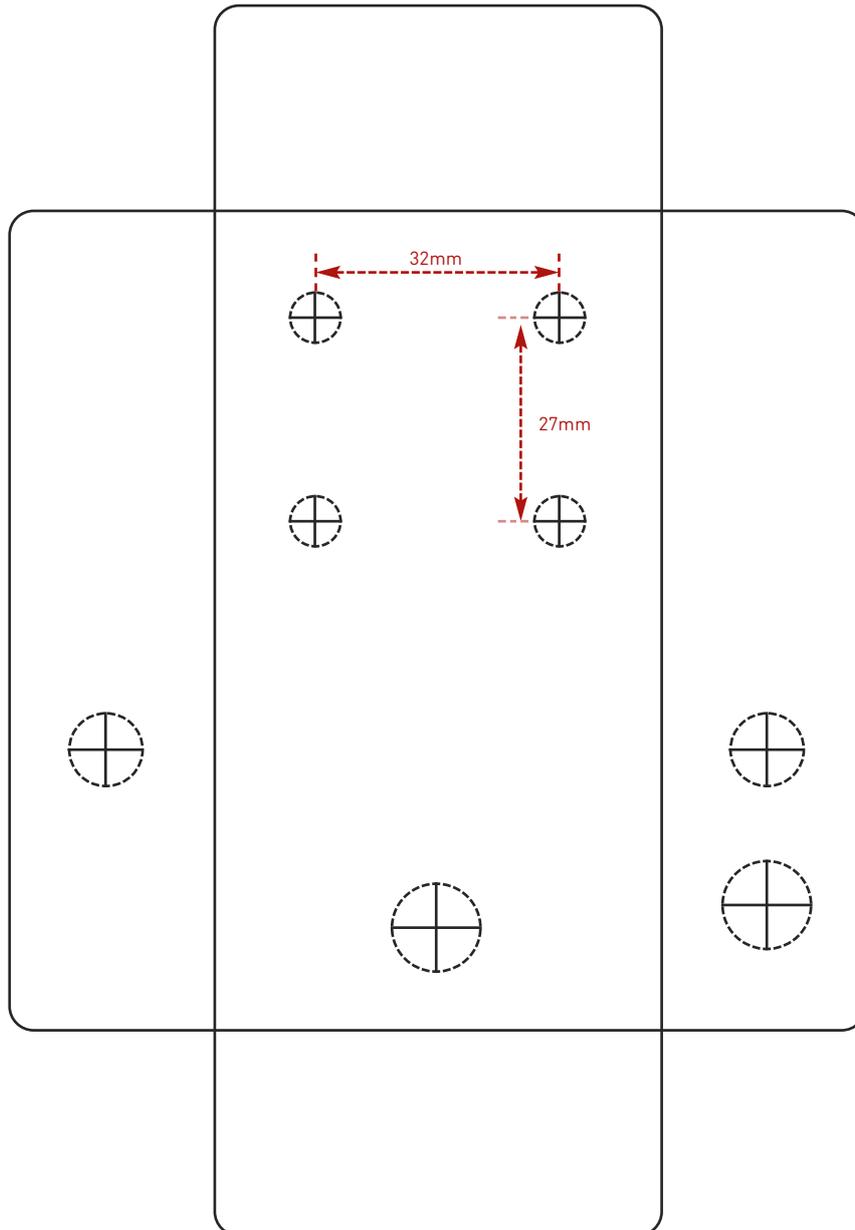
Drilling template

Hammond 1590B
60 x 111 x 31mm

Recommended drill sizes:

Pots	7mm
Jacks	10mm
Footswitch	12mm
DC Socket	12mm

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.

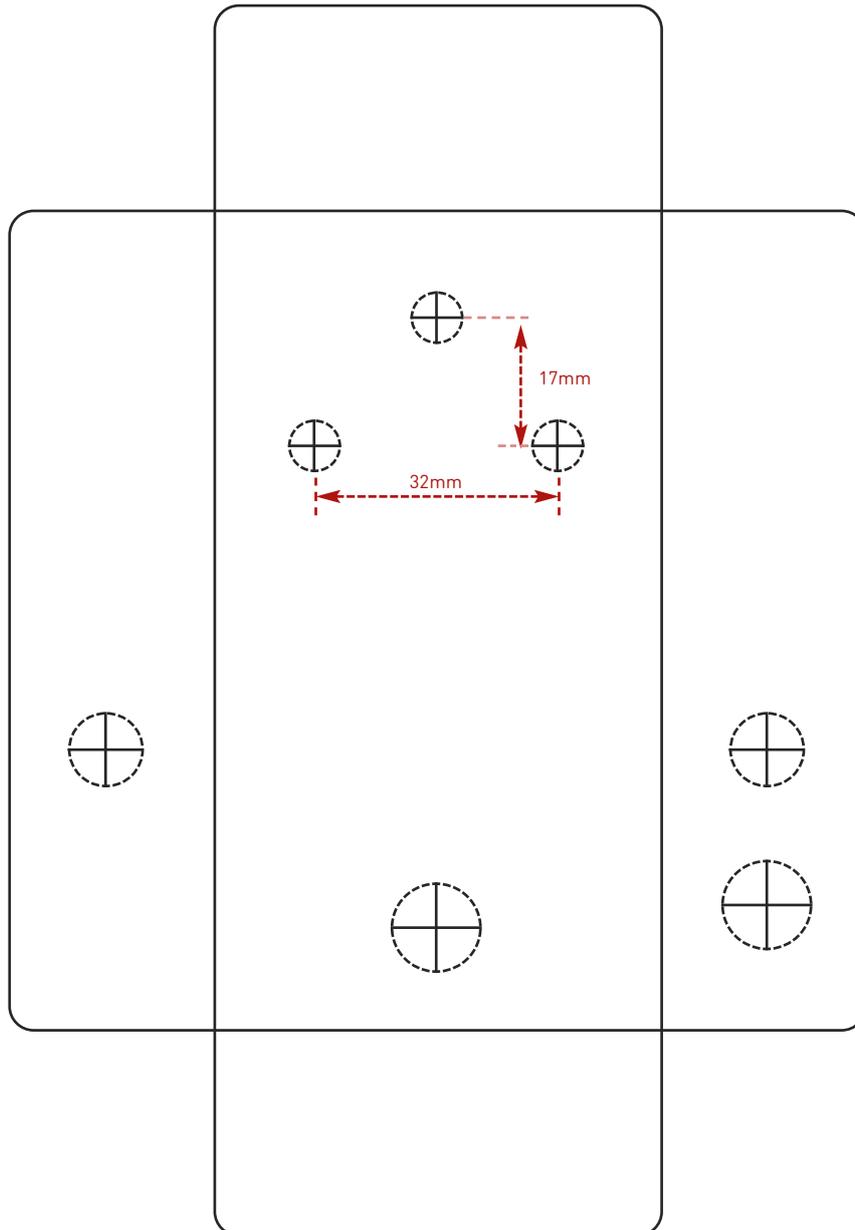
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