



Disassembling Buffalo MiniStation External Hard Drive (Thunderbolt & USB 3)

Removal of hard drive and get at the logic board.

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INTRODUCTION

This is a great little external drive, but I have been having difficulty in getting a connection through the USB cable. I thought it might be the cable but wanted to take a look inside, and being a curious too I guess; wanted to see what was under the hood in this thing.

I have to say, this was an easy job to begin with (they all are right), taking the Buffalo MiniStation apart is not that difficult a task but getting it back together was a lessons learned, hopefully this guide will prevent you from making a similar mistake.

TOOLS:

- [Heavy-Duty Spudger](#) (2)
 - [Phillips #2 Screwdriver](#) (1)
 - [Anti-Static Mat](#) (1)
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Step 1 — External Hard Drive (Thunderbolt & USB 3)



- Run one of the heavy duty spudger's between the plastic top and the aluminium case. Begin from the USB connector end and slide to one of the sides; leave this in place.
- There are no clips (in mine anyway) holding that case to the base, it's just a double sided sponge sticker.

Step 2



- Granted it takes some force, but if you can get at least the left and the right side to pull away equally it will eventually give and come loose.
- The result is a plastic case, housing the hard drive and electronics but that's easy to disassemble once you have removed the outer aluminum cover, as that's all it is. There is no other connection, even the holes for connectivity are just flush, they play no part in holding in the hard drive chassis.
- In fact, if you like you can push the rubber feet through the aluminum case, as that's also part of the inner assembly. Just remember not to squeeze the aluminum case too tightly or malformed it as this in effect will just grip the internals even more making it even more difficult to remove.

Step 3



- Once the outer aluminium case is away you're left with 4 small Philips screws holding the actual drive in place, two on either side.
- Take a small Philips screwdriver and remove these four screws.

Step 4



- Here comes the fiddly bit and if you ask me; overkill engineering.
- In total, there are 12 plastic clips retaining a cage holding the hard drive in place. 4 on the long sides and 2 on the short. Using a spudger, run the plastic in from the connectivity side.
- These clips are remarkably bendy, but they will break, mine did. The point to remember is if they do, it's honestly no hardship as the screws are really the guys that keep the drive in place anyway.
- Once the assembly comes away from the white plastic top there is a black plastic piece that separates too. You are left with a thin steel enclosure protecting both the drive and logic board electronics.

Step 5



- IF you fold back the steel enclosure you reveal the logic board attached to the hard drive by two small philips screws.
- That's it, you're at the logic board. Reassembly is the reverse of these instructions.
- A key point and lesson learnt for me here. When placing the enclosure back inside the white plastic case, start with the steel enclosure but leave off the black plastic retainer until the drive is nested in the white case with the connectivity ports realigned. If not and you try to place it back as it came out, the retainer will crease the steel.

To reassemble your device, follow these instructions in reverse order.