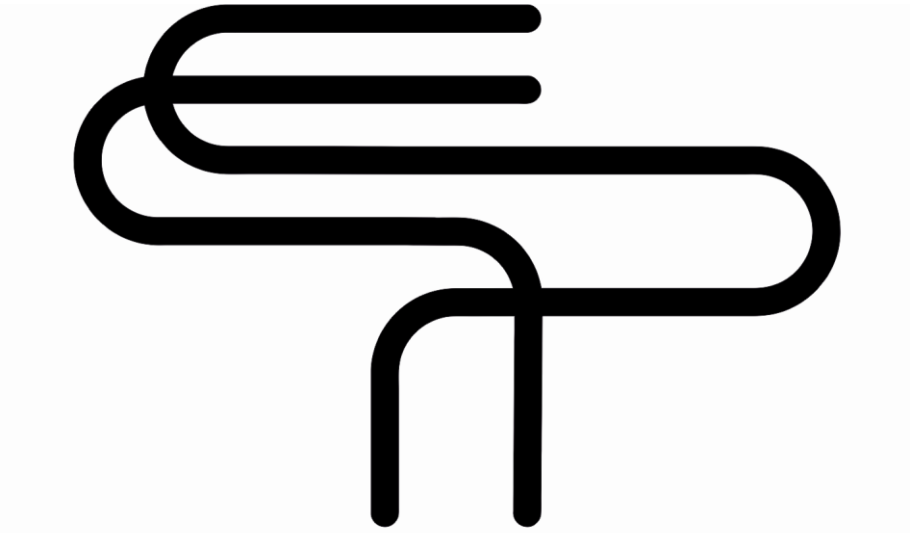
Manual for Upgrading the Extreme Music Server Storage

Add Hardware



TAIKO AUDIO

CAUTION:

It is good practice to ground yourself (to discharge static) by touching the Extreme's top cover (with the power still connected) before handling the cards.

Shut down the Extreme and disconnect mains before starting!!

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Hyper X card

The Hyper X card contains the individual storage modules. For our purpose, all Hyper X cards work the same way and there is no need to get the latest 4th gen version. The Hyper X card can fit up to four M.2 SSD modules.

Storage Modules

Our current recommendation is to stick to a maximum of 8 internal drives (divided over two Hyper X cards). You can fit more drives but this does come with an impact on the sound quality. Each can be sized up to 8TB for a maximum of 64TB internal storage using two Hyper X cards, but this is not cheap. 2TB drives are far more economical than 4TB or 8TB drives.

2 TB Module options:

- Intel 660p, 665p, 670p. Note that Intel does not sell the larger 4 or 8TB modules.
- Western Digital WD Blue SN5100 2TB, WDS200T5B0E, M.2 2280 / NVMe / PCIe 4.0 x4
- Western Digital WD_BLACK SN7100 2TB, WDS200T4X0E, M.2 2280 / NVMe / PCIe 4.0 x4

There is no difference between the two WD options for this purpose.

4 TB / 8 TB modules options:

- Sabrent (best performing).
- Western Digital (for 4 TB only) (alternative)

Storage can be purchased directly, for instance from the following stores:

- NewEgg
- DigiKey
- Mouser
- Amazon

The purchased modules can be used right out of the box.

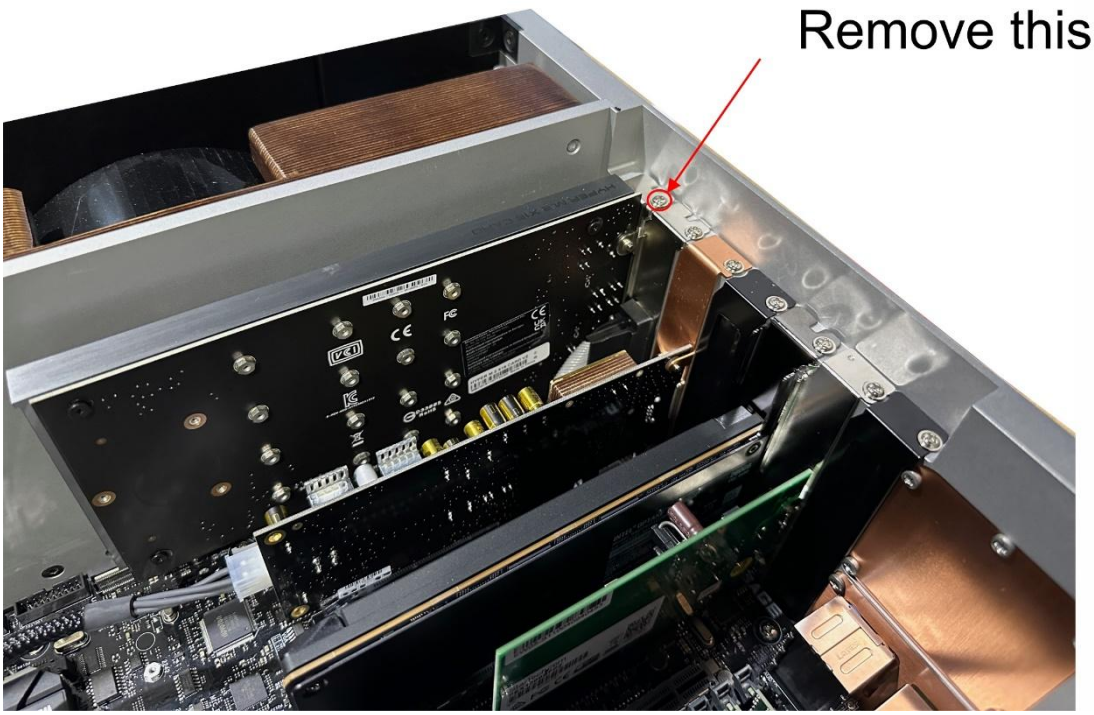
More Storage Options

You can also add more U.2 *internal* drives directly on the motherboard which are available up to 16TB each, but this is very impractical and we do not recommend it. This is for expert users only!

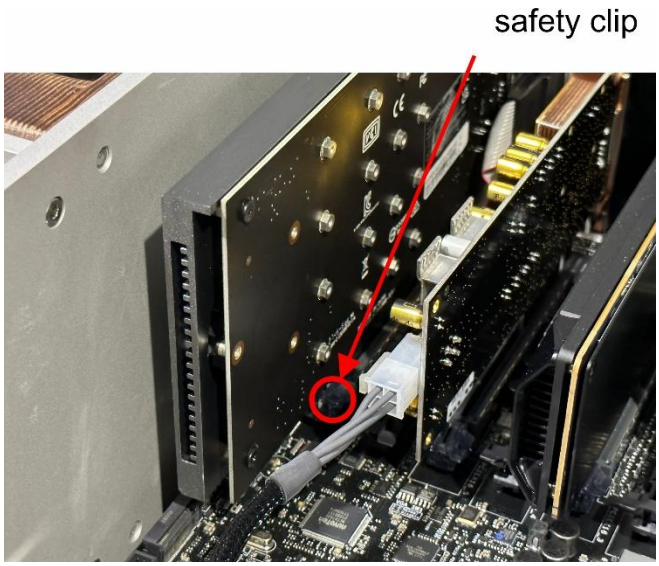
External USB drives can also be used, if powered externally the power supply would definitely impact things, significantly.

Adding Storage modules to an existing Hyper M.2 card

Remove the cover from the Extreme



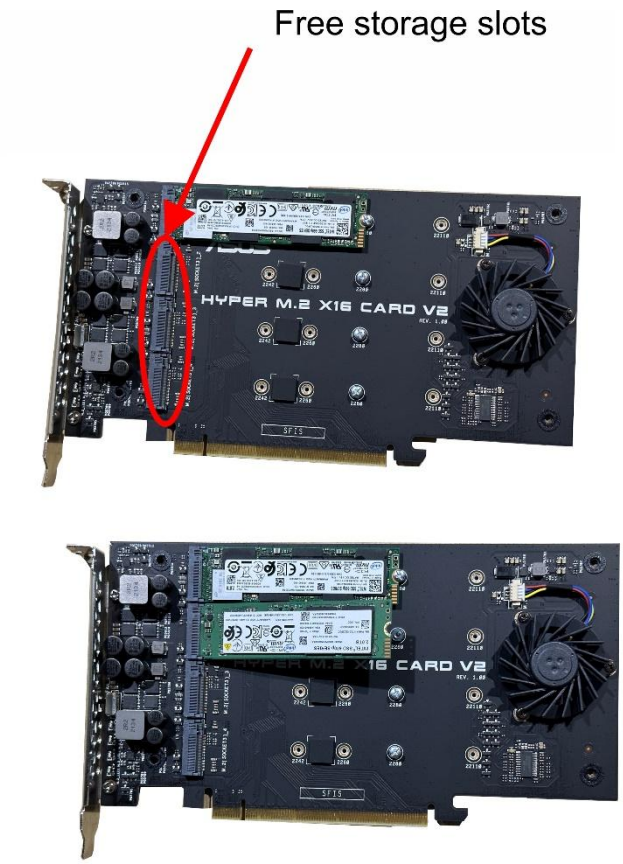
Unlock the safety clip and carefully pull out the Hyper M.2 storage card. Note the slot (usually slot 1).



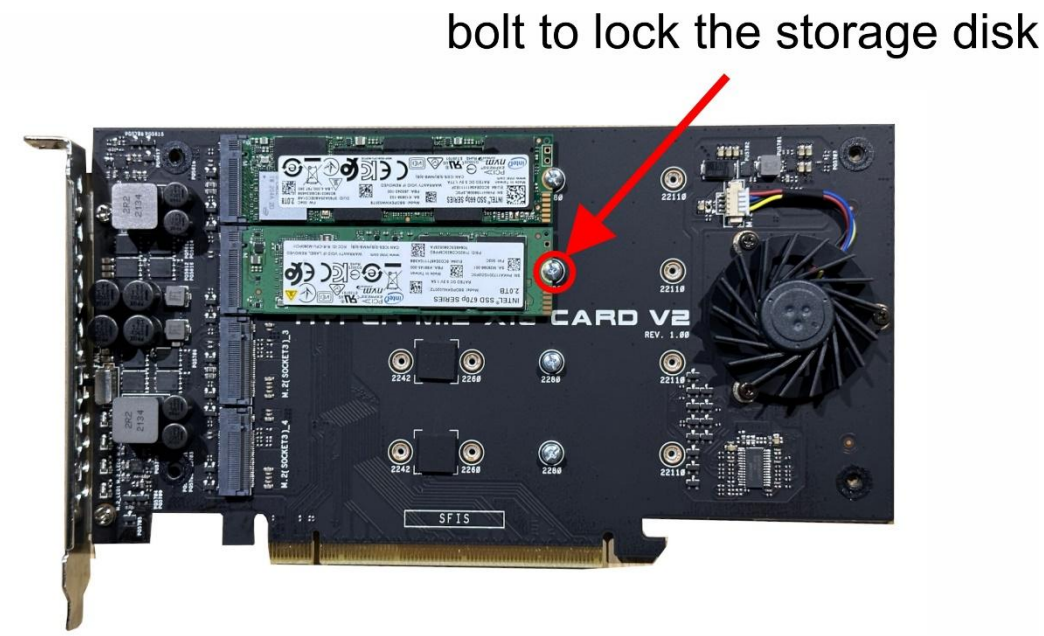
Remove 4 black bolts on the card

Remove the metal cover of the storage card

Place the new storage in one of the free slots.

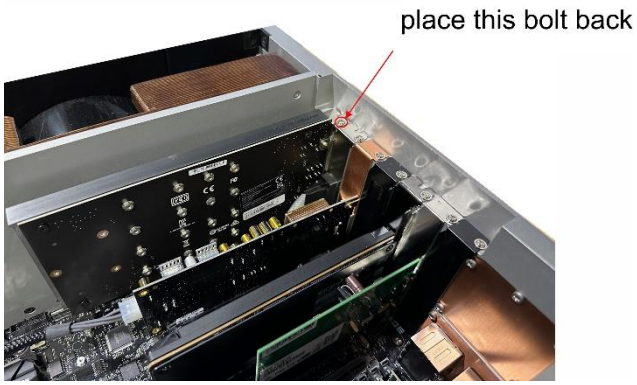


If all slots on the existing Hyper M.2 card are used, you need an extra Hyper M.2 Card. See the next chapter "Adding an extra Hyper M.2 card" starting on page 8.



Place the bolt to lock the disk and then place the metal cover back on the Hyper M.2 card

Place the Hyper M.2 storage card back into the same slot (usually slot 1) and fixate it with the bolt on top.



Now you are all set.

Adding an extra Hyper M.2 card

Hyper M.2 cards can only be installed in Slot 1 and Slot 7 (the outer most slots). None of the other slots are available for storage.

This means you can only install 2 ASUS hyper M.2 cards in the server. If you need more than 16TB of storage then you need to use the larger 4 or 8TB disks. However, these larger disks are not the most economical option.

How to remove part of the internal storage

If you want to keep your music, back it up to a disk or USB-stick. Then you can delete the drive pool, get the memory out, and make a new drive pool.

For more information, see the separate PDF manual: “Extreme Storage Upgrade Software Configuration Manual.pdf”.