

Sooloos Media Drive 600 & 'RAID'

What is 'RAID'?

RAID is an acronym for **redundant array of independent disks**. This is a storage technology that combines multiple disk drive components into a logical unit where data* is distributed across the drives in one of several ways called 'RAID levels'.

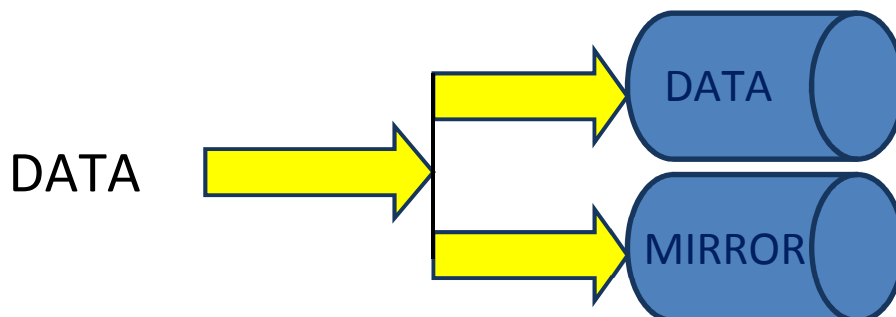
**In the context of Sooloos 'data' are the audio, metadata, and system files in a Sooloos system.*

What 'RAID levels' are possible with a Media Drive 600?

The Media Drive 600 is configured as RAID 1 by default and can, under special circumstances, be optionally configured as RAID 0. The hard drives have to be identical capacity, though not necessarily from the same manufacturer.

What are the features of RAID 1 with the Media Drive 600?

- when hard drives are installed, RAID 1 is the default for the Media Drive 600
- in this RAID level, Sooloos data is written identically to both drives producing a 'mirror'



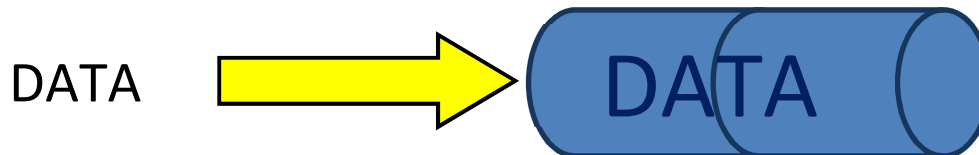
- this configuration is fault-tolerant, so that Sooloos will still operate if one hard drive fails
- as the other hard drive holds identical data, replacing the faulty drive will automatically copy all the content onto the new disk so that a new 'mirror' is created
- when using 2x 2TB hard drives, the storage capacity of the Media Drive 600 in RAID 1 is **2TB**

Do I need to back-up the Media Drive 600 in RAID 1?

Yes - backup outside of the Sooloos system (e.g. onto NAS device) is still required in RAID 1 as hardware can fail e.g. either both hard drives, or the entire Media Drive 600 or suffer catastrophic failure e.g. fire, flood, earthquake etc.

What are the features of RAID 0 with the Media Drive 600?

- this is an optional configuration that can only be requested in writing to Meridian and the change itself can only be carried out by Meridian Technical Support
- in this RAID level, data is written across both drives



- when using 2x 2TB hard drives, the storage capacity of the Media Drive 600 in RAID 0 is **4TB**

Do I need to back-up the Media Drive 600 in RAID 0?

Yes - this is essential as RAID 0 is **not** fault-tolerant, in the event of a failure of a single hard drive, Sooloos will cease to operate and **ALL DATA WILL BE LOST**.

When can the RAID level of a Media Drive 600 be changed?

The RAID level of a Media Drive 600 can be changed at any time, though prior to installation or loading of audio content is recommended as the process of changing the RAID level causes **ALL DATA TO BE LOST**.

If the Media Drive 600 already has content on it then a back-up will need to be run before the change is implemented (a back-up strategy should be in place already). This is because when the change is made from RAID 1 to RAID 0, both hard drives in the Media Drive 600 are reformatted as part of the process and **ALL DATA WILL BE LOST**.