



## Roxio: Why does my Roxio product see 4.7 GB DVD discs as 4.38 GB only?

- Roxio Secure Burn Enterprise
- Video Copy & Convert 6
- Roxio Easy VHS to DVD for Mac
- Roxio Easy CD and DVD Burning
- Creator NXT
- Roxio Easy VHS to DVD Plus
- Roxio Easy CD and DVD Burning 2
- Roxio MyDVD
- Roxio Easy LP to MP3
- Toast Burn
- Toast
- MyDVD Pro
- Toast Audio
- Toast DVD

## Symptoms

Roxio disc burning software sees 4.7 GB DVD capacity as 4.38 GB only.

## Cause

This is due to the differences between Binary and Decimal notation used by software developers on one hand and the manufacturers on the other.

## Explanation

This is simply due to differences in Binary versus decimal notation.

There is 1024 bytes in a kilobyte, and this is a fact.

However, manufacturers quote disc capacity in decimal notation. For example, single-layer DVD discs are said to have a capacity of "4.7 GB". Yes these discs actually stores 4,700,000,000 bytes (give or take a few), but when you translate this to the actual binary notation used for storage, it is a different story. Using traditional binary notation, that disc has a capacity of 4,700,000,000 bytes, which when divided by 1024 will equal to 4,589,843.75 KB. This divided by 1024 = 4,482.269+ MB, and then divided by 1024 = 4.377+ GB, which is often rounded to 4.4 GB.

The "4.7 GB" is a **marketing label** manufacturers use to represent their DVD disc capacity; pretty much like the "4K" label used for UltraHD TVs. This isn't really 4K, since most (if not all) TVs that use this label have a resolution of 3,840x2160 only. True 4K has a resolution of 4,096x2160.

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