How to Connect a Hard Drive to Raspberry Pi

More convenient is the option to use the ntfs-3g software, so that the Raspberry Pi can read the NTFS file system:

```
sudo apt install ntfs-3g
```

Note: If the drive is in FAT32 format, you'll need to install vfat instead.

First, find its UUID string:

```
sudo blkid
```

In the response, the final alphanumeric string is the UUID; keep a note of this. Next, create a location for the mount point. This is typically:

```
sudo mkdir /mnt/mydisk
```

Note: Swap "mydisk" with your preferred disk label.

Assign permissions with:

```
sudo chmod 770 /mnt/mydisk
```

Next, mount the drive with:

```
sudo mount -t ntfs-3g -o uid=1000,gid=1000,umask=007 /dev/sda1 /mnt/mydisk
```

Once you've done this, you should be able to access the drive in Raspbian. But what if you want to access the disk after a reboot?

The answer is to edit the fstab. Begin by backup:

```
sudo cp /etc/fstab /etc/fstab.backup
```

Next, edit the original:

```
sudo nano /etc/fstab
```

Add the information need to mount the disk; this begins with the 16-character UUID string you made a note of earlier:

```
UUID=ABCDEFGH12345678 /mnt/volume ntfs-3g uid=1000,gid=1000,nofail,umask=007 0 0
```

Next, reboot:

```
sudo reboot
```

You should now find that the HDD storage is accessible each time you boot up your Raspberry Pi.