

Pi SD Card Tasks

Most of these operations take bloody ages, around twenty minutes, and don't necessarily produce an output while working.

Run:—

```
lsblk
```

to see where the SD card is — usually sdf.

To mount image for editing:—

```
sudo fdisk -l Pi.img
```

```
Disk Pi.img: 15.8 GB, 15836643328 bytes
255 heads, 63 sectors/track, 1925 cylinders, total 30930944 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk identifier: 0x7442af85
```

Device	Boot	Start	End	Blocks	Id	System
Pi.img1		8192	96663	44236	c	W95 FAT32 (LBA)
Pi.img2		98304	30930943	15416320	83	Linux

Multipl Sector Size (512) by Start (98304) which gives an offset of 50331648

```
sudo mount -o loop,offset=50331648 Pi.img ~/temp
```

Do the editing and then:—

```
sudo umount ~/temp
```

To back-up SD card:—

```
sudo dd if=/dev/sdf of=Pi.img bs=1M
```

To shrink the image:—

```
sudo pishrink.sh ORIGINAL_IMAGE NEW_IMAGE
```

Needs space for two copies of the full-sized image. NEW_IMAGE can be omitted to re-size the original but if it goes wrong you're screwed.

To flash SD card:—

```
sudo dd bs=4M if=Pi.img of=/dev/sdf conv=fsync
```