

Raspberry Pi 3 Boot to USB

This is taken from the following URL: <https://www.raspberrypi.org/documentation/hardware/raspberrypi/bootmodes/msd.md>

I have documented it here as I use this guide a lot, and I don't want to lose it :)

This tutorial explains how to boot your Raspberry Pi 3 from a USB mass storage device such as a flash drive or USB hard disk. Be warned that this feature is experimental and may not work with all USB mass storage devices.

USB Hard Drives seem particularly fussy.

Program USB Boot Mode

Before a Pi will network boot, it needs to be booted with a config option to enable USB boot mode. Enabling this config option requires special `start.elf` and `bootcode.bin` files. These can be installed by using the "next" branch on `rpi-update`.

```
sudo mkdir /mnt/target sudo mount /dev/sda2 /mnt/target/ sudo mkdir /mnt/target/boot sudo mount /dev/sda1 /mnt/target/boot/ sudo apt-get update; sudo apt-get install rsync sudo rsync -ax --progress / /boot /mnt/target
```

```
cd /mnt/target sudo mount -bind /dev dev sudo mount -bind /sys sys sudo mount -bind /proc proc sudo chroot /mnt/target rm /etc/ssh/ssh_host* dpkg-reconfigure openssh-server exit sudo umount dev sudo umount sys sudo umount proc
```

```
sudo sed -i "s,root=/dev/mmcblk0p2,root=/dev/sda2," /mnt/target/boot/cmdline.txt sudo sed -i "s,/dev/mmcblk0p,/dev/sda," /mnt/target/etc/fstab
```

```
cd ~ sudo umount /mnt/target/boot sudo umount /mnt/target # sudo poweroff
```

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