

Blank hi speed 32 GB minimum SD card

1. Download Raspbian lite from raspberrypi.org
2. dd it onto a SD card – DO NOT BOOT IT
3. plug the SD card into a USB adapter on a linux box
4. mount /dev/sda1 and remove init=resize from the end of the cmdline.txt boot script
5. fdisk /dev/sda (make sure sda is the right disk)
6. delete partition 2
7. add a new partiion, primary, partition=2, start sector same as sda2 previous start sector, last sector +8G, leave ext signature on asking
8. add new primary sector 3, all the same except use 16GB and start sector as end of previous partion +1
9. w and quit, and eject or shutdown
10. place newly written card in rpi and boot it
11. cp all pi utils into /home/pi/utils
12. sudo raspi-config
 - a. change passwd to hankthetank
 - b. network options
 - i. hostname wifipi
 - ii. specify a working wireless network
 - iii. disable predictable network interface names
 - c. Boot options
 - i. Select console (B1)
 - ii. Do not wait for a network connection at boot
 - d. Localization
 - i. Change time zone
 - ii. Change country
 - iii. Change keyboard
 - e. Interfacing options
 - i. Turn on ssh server
 - ii. Serial
 1. No login shell
 2. Serial port hardware enabled
 - f. Finish and reboot
13. sudo mkfs /dev/mmcblk0p3
14. sudo e2label /dev/mmcblk0p3 hank
15. add the following line to /etc/fstab
 - a. LABEL=hank /home/hank ext4 defaults,noatime 0 2
16. sudo ip link set wlan0 up
17. sudo shutdown -r now
18. reboots
19. sudo apt-get update
20. sudo apt-get upgrade
21. sudo shutdown -r now

22. `sudo /home/pi/Utils/cliap.sh`
23. `sudo shutdown -r now`
24. `sudo /home/pi/Utils/part2`
25. `shutdown -r now`
26. `cd /home/pi/Utils/roroot`
27. `sudo mount /boot`
28. `cp /boot/cmdline.txt ./RW_cmdline.txt`
29. `cp /boot/config.txt ./RW_config.txt`
30. `./install` (then follow directions)
31. `shutdown -r now`
32. you are now in RO mode with overlay fs. Check with `mount | grep overlay` and `mount | grep mmc`
33. `cd /home/pi/Utils/roroot`
34. `cp /boot/cmdline.txt ./RO_cmdline.txt`
35. `cp /boot/config.txt ./RO_config.txt`
36. `cp RO* /boot`
37. `cp RW* /boot`
38. use `/boot/ROOTMODE` to switch between modes