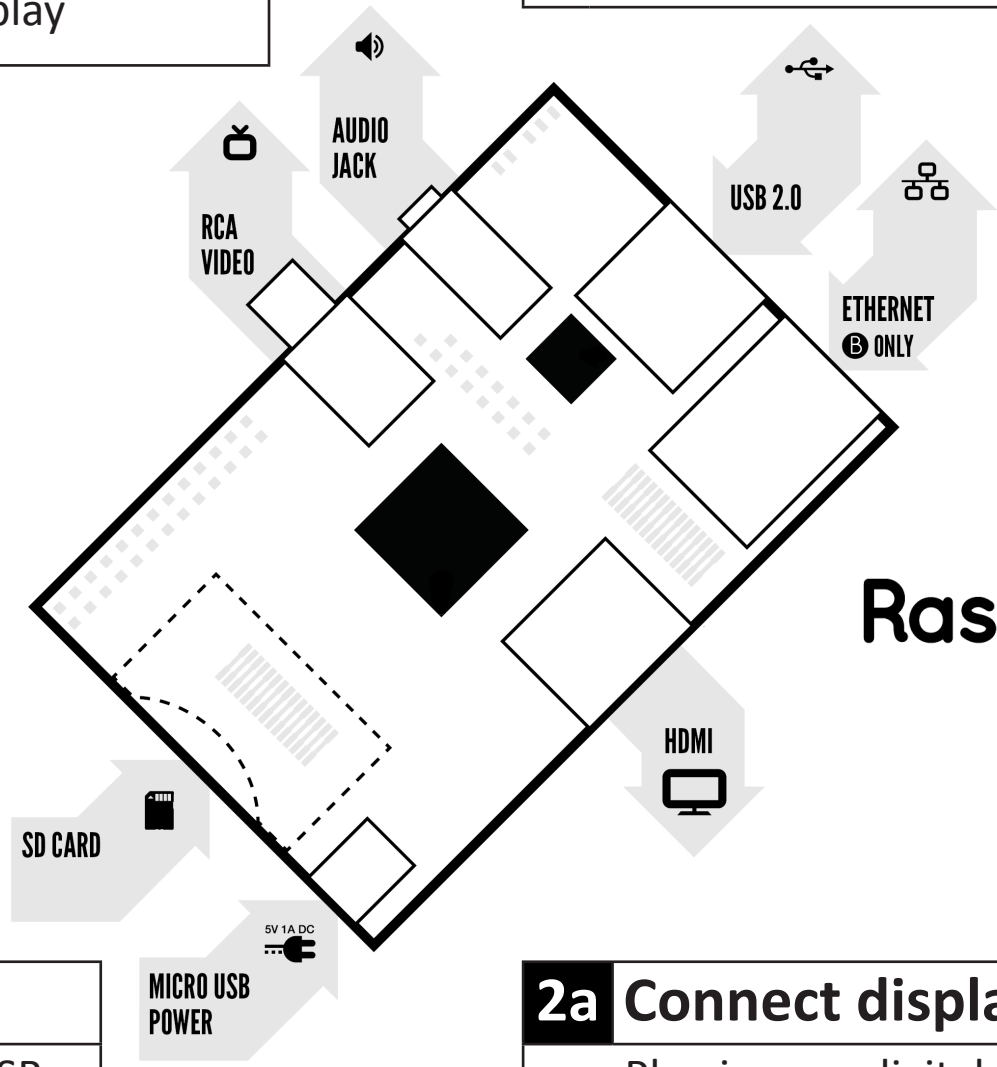
2b Connect display

If *not* using HDMI, plug in your analogue TV or display

3 Connect input

Plug in a USB keyboard and mouse



4 Connect network

Connect to your wired network [optional]

Raspberry Pi
Quick start

1 Insert SD card

See page 3 for how to prepare the SD card

5 Power up

Plug in the micro USB power supply

2a Connect display

Plug in your digital TV or monitor

To set up your Raspberry Pi you will need:

	Item	Minimum recommended specification & notes
1	SD card	• Minimum size 4Gb; class 4 (the *class* indicates how fast the card is). • We recommend using branded SD cards as they are more reliable.
2a	HDMI to HDMI / DVI lead	• HDMI to HDMI lead (for HD TVs and monitors with HDMI input). **OR** HDMI to DVI lead (for monitors with DVI input). • Leads and adapters are available for few pounds -- there is no need to buy expensive ones!
2b	RCA video lead	• A standard RCA composite video lead to connect to your analogue display if you are not using the HDMI output.
3	Keyboard and mouse	• Any standard USB keyboard and mouse should work. • Keyboards or mice that take a lot of power from the USB ports, however, may need a powered USB hub. This may include some wireless devices.
4	Ethernet (network) cable [optional]	• Networking is optional, although it makes updating and getting new software for your Raspberry Pi much easier.
5	Power adapter	• A good quality, micro USB power supply that can provide at least **700mA at 5V** is essential. • Many mobile phone chargers are suitable—check the label on the plug. • If your supply provides less than 5V then your Raspberry Pi may not work at all, or it may behave erratically. Be wary of very cheap chargers: some are not what they claim to be. • It does not matter if your supply is rated at *more* than 700mA.
6	Audio lead [optional]	• If you are using HDMI then you will get digital audio via this. • If you are using the analogue RCA connection, stereo audio is available from the 3.5mm jack next to the RCA connector.

Know your leads:

HDMI connector

HDMI to DVI lead

RCA composite video connector

Preparing your SD card for the Raspberry Pi

In order to use your Raspberry Pi, you will need to install an Operating System (OS) onto an SD card. An Operating System is the set of basic programs and utilities that allow your computer to run; examples include Windows on a PC or OSX on a Mac.

These instructions will guide you through installing a recovery program on your SD card that will allow you to easily install different OS's and to recover your card if you break it.

1. Insert an SD card that is 4GB or greater in size into your computer
2. Format the SD card so that the Pi can read it
    a. **Windows**
        i. Download the SD Association's Formatting Tool[1] from https://www.sdcard.org/downloads/formatter_4/eula_windows/
        ii. Install and run the Formatting Tool on your machine
        iii. Set "FORMAT SIZE ADJUSTMENT" option to "ON" in the "Options" menu
        iv. Check that the SD card you inserted matches the one selected by the Tool
        v. Click the "Format" button
    b. **Mac**
        i. Download the SD Association's Formatting Tool from https://www.sdcard.org/downloads/formatter_4/eula_mac/
        ii. Install and run the Formatting Tool on your machine
        iii. Select "Overwrite Format"
        iv. Check that the SD card you inserted matches the one selected by the Tool
        v. Click the "Format" button
    c. **Linux**
        i. We recommend using `gparted` (or the command line version `parted`)
        ii. Format the entire disk as FAT
3. Download the New Out Of Box Software (NOOBS) from:

    downloads.raspberrypi.org/noobs

4. Unzip the downloaded file
    a. **Windows** - Right click on the file and choose "Extract all"
    b. **Mac** - Double tap on the file
    c. **Linux** - Run `unzip` [downloaded filename]
5. Copy the extracted files onto the SD card that you just formatted
6. Insert the SD card into your Pi and connect the power supply

Your Pi will now boot into NOOBS and should display a list of operating systems that you can choose to install. If your display remains blank, you should select the correct output mode for your display by pressing one of the following number keys on your keyboard;

1. **HDMI** mode - this is the **default** display mode.
2. **HDMI safe** mode - select this mode if you are using the HDMI connector and cannot see anything on screen when the Pi has booted.
3. **Composite PAL** mode - select either this mode or **composite NTSC mode** if you are using the composite RCA video connector
4. **Composite NTSC** mode

[1]*Note: The built-in Windows formatting tool will only format the first partition that Windows can read - not the entire disk. For this reason we advise using the official SD Card Association Formatting Tool.*