

Any questions? Add a comment!

SHOPPING LIST!

Raspberry Pi

Zero board only with adaptors / pins :

[UK/Europe from Pimoroni](#) (get the Pi Zero plus adaptors kit)

[US from Adafruit](#) make sure to add the USB OTG Host Cable and Break-away 0.1" 2x20-pin Strip Dual Male Header

NB the Pi Zero is the cheapest option but you will need to solder the pins on! For a solution without soldering find an Pi model A+, B+, 2 or 3. Links for a Pi 3 are in the Amazon sections below.

Amazon shopping list :

Raspberry Pi Model 3 [UK](#) [US](#) (includes wifi so doesn't need dongle)

Micro SD card [UK](#) [US](#)

Pi power supply 2A [UK](#) [US](#)

USB wifi dongle [UK](#) [US](#) (not required for Pi model 3)

Pi Zero base board [UK](#) [US](#) (comes with breadboard)

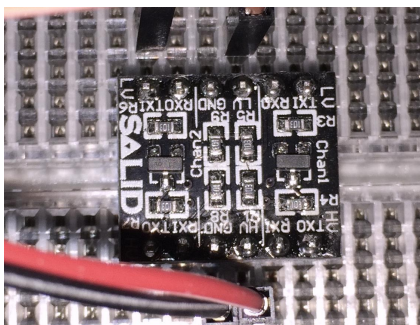
Pi base board (all other Pis) [UK](#) [US](#) (Note - UK version requires additional [breadboard](#))

(Alternatively you can get the [Pibow case](#) with a [Pibow base](#) and [400 point breadboard](#) from Pimoroni.)

Addressable LED String [UK](#) [US](#)

Jumper cables [UK](#) [US](#)

Logic Level converter [UK](#) [US](#)



The UK version on Amazon looks like this - so a bit different from the photos in the article, but the pins match.

Optional :

For making your own cables, or if the LEDs don't come with suitable connectors

Dupont connectors [UK](#) [US](#)

Crimp tool [UK](#) [US](#)

or

Antex XS25 Soldering iron [UK](#) (US recommendations please!)

Also useful : Wire cutters/ strippers [UK](#) [US](#) (although worth investing in better ones if you're going to be doing a lot of electronics!)

I will get a teeny commission if you purchase through these Amazon links but please feel free to buy it elsewhere - I've tried to find Amazon Prime items wherever possible so you should get the stuff quickly!

International visitors - if you find this stuff anywhere more easily accessible to you, please comment here with the link so I can share.

SD CARD

Download the [SD card disk image here](#) (v0.3) ** Note updated 2nd December!

TROUBLESHOOTING

The lights don't come on at all.

Check SD card :

When you turn on the Raspberry Pi you should see the disk activity light flashing randomly for a minute or two and then stop with the occasional flash. If it doesn't do this, then there's something wrong with the SD card. Download the image again, and write it again. If you get the same problem then try a different card.

Check wiring :

If there are no lights on the Pi, ever, then you could have a faulty power supply, but it's more likely that there's a short on the wiring. Double check them all!

If the Pi seems to boot up properly then it's likely a wiring problem. So re-check all the wiring, particularly the guidance about connections with the lights.

First light in string pulses red - network error.

This means there's an issue connecting to your network. Double check the wpa_supplicant config file. Try moving your Pi closer to the router. Some of the wifi dongles have poor reception compared to laptops. Also, your router may require additional settings so check this [wpa supplicant guide](#).

If you still have trouble, it's probably worth plugging in a network cable to your Raspberry Pi and connecting it that way. If you have a Zero or A+ you'll need a USB ethernet adaptor.