

AnjunaGlow

*For an always up-to-date PDF version of these instructions,
scan the QR code below*



*The Anjuna logo remains the intellectual property of Involved
Productions Ltd.*

Thank you!

I fell in love with the glowing Anjuna sign suspended above the decks at Printworks back in 2021 & knew I needed to make my own. Fast-forward to today & with the custom circuit boards I've now designed I finally have something good enough to share with the Anjunafamily.

If you have any questions, feedback or just want to send me a photo of the sign hanging on your wall, please don't hesitate to reach out!

info@cjdavies.co.uk

You can also find me on the official Anjuna Discord with the user ID

cjdavies

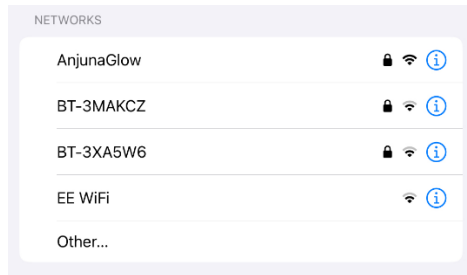
Powering the sign

The sign should run from *any* source of USB power, as I specifically designed the circuit to keep consumption under 500mA. Any USB phone charger, powerbank or a spare USB socket on a computer/laptop, no matter how old, should work with no problems.

You can expect long run times on even a modestly sized powerbank. The absolute maximum consumption is solid white colour with no effect/animation. This is around 460mA, which means the sign will use 460mAh per hour & run for around 10 hours from a 5000mAh powerbank.

Connect via hotspot

When you connect the sign to a USB power source, a hotspot called **AnjunaGlow** will appear.



Connect to this hotspot with the password **above&beyond**

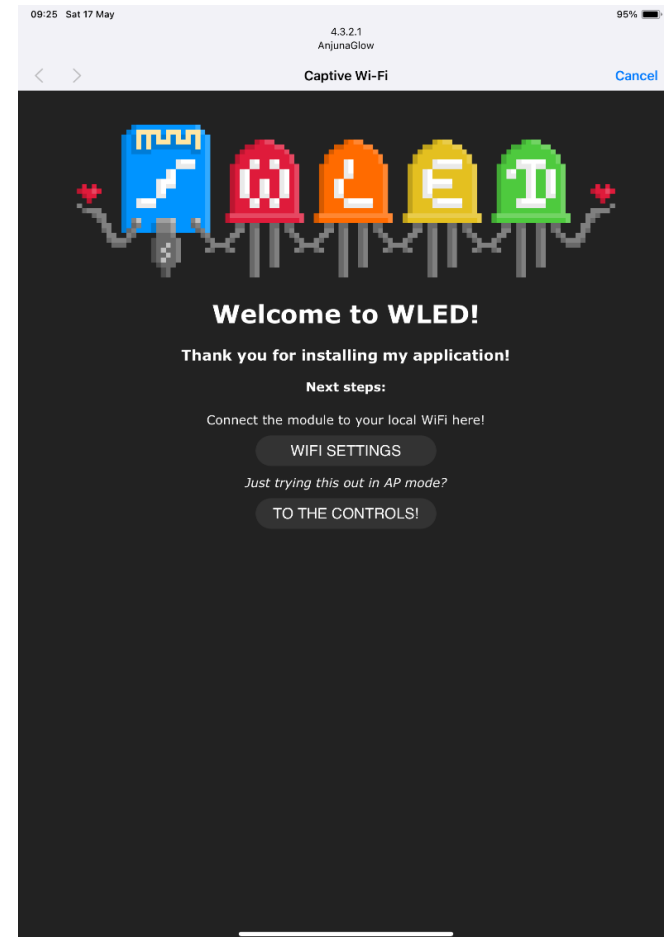
If your phone/tablet/computer warns you that the network doesn't provide an Internet connection, tell it to 'Use Without Internet' or similar.



Once you connect you should automatically be redirected, like when you connect to free WiFi at a hotel or airport. If this doesn't happen, open your browser & go to the address **wled.me** or **4.3.2.1**

When you see the welcome page, the bottom button **[TO THE CONTROLS!]** will take you straight to the WLED controls so you can start trying things out!

Try different **effects**, apply different **color palettes** & save combinations you like as **presets**.



Connecting the sign to your home WiFi network

If you want to, you can connect the sign to your home WiFi network. This means that when you are at home, you can access the controls *without* having to switch to the AnjunaGlow hotspot.

From the welcome page (previous picture) click/tap **[WIFI SETTINGS]** or if you are already at the controls click/tap **[Config]** at the top & then **[WiFi Setup]**.

On the WiFi setup page

1. Click/tap the **[SCAN]** button
2. Select your WiFi network from the dropdown list
3. Enter the password for your WiFi network in the **Network password:** field
4. Take note of the address under the section **mDNS address**, this will look something like **http://wled-2ffffc.local**
5. Click/tap the **[Save & Connect]** button at the top

You should now be able to access the sign from any device on your home WiFi network by going to the address you took note of in step 4.

*When you connect the sign to power, it will automatically start the **AnjunaGlow** hotspot with the password **above&beyond** if it can't connect to your home WiFi.*

So if you type the password wrong, or take the sign away from your home, the hotspot will reappear.

16:51 Wed 21 May 98%

WiFi Settings

Back Save & Connect 5

WiFi setup

Connect to existing network

Scan 1

Wireless networks

Network name (SSID, empty to not connect):

2 BT-3XA5W6 (-81 dBm) ↕

Network password: 3

Static IP (leave at 0.0.0.0 for DHCP)

Also used by Ethernet:

0 . 0 . 0 . 0

Static gateway:

0 . 0 . 0 . 0

Static subnet mask:

255 . 255 . 255 . 0

+

DNS server address:

8 . 8 . 8 . 8

mDNS address (leave empty for no mDNS):

http:// wled-b72980 .local 4

Client IP: Not connected

Configure Access Point

Changing the mount

There are three different mounts included with the sign. One type of mount will already be attached when you receive it.

The **keyhole** mount allows you to hang the sign on the head of a screw protruding from a wall. You may have seen keyholes like this on the underside of a power strip or on the back of a wall clock.

The **3M Claw** mount allows you to hang the sign from a **7kg** 3M Claw drywall/plasterboard hook. These hooks can be installed into drywall using no tools whatsoever.

The **¾" ACME** mount allows you to screw the sign onto a paint pole with a standard ¾" ACME thread, which are commonly used for totems.

When using the ¾" ACME mount your pole should screw in **with minimal resistance**. If you encounter a lot of resistance your pole likely isn't ¾" ACME thread.

The mounts attach to the back of the sign via threaded brass inserts. This means they can be interchanged, however **this should only be attempted if you are comfortable removing the translucent snap-fit back**.

Start by placing the sign face down on a soft surface to prevent scratches.



Carefully pull on whichever mount is currently installed to begin releasing the translucent back.



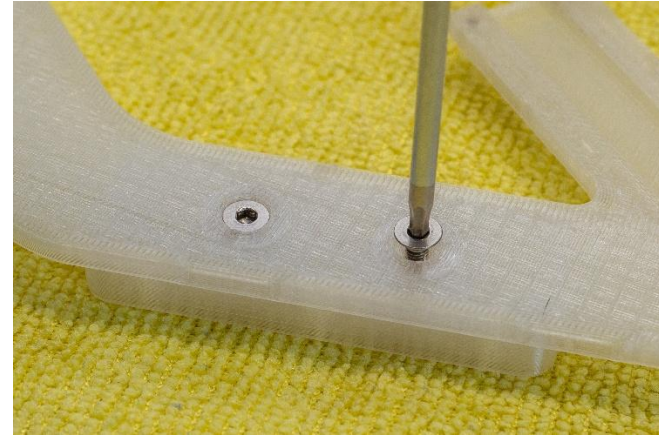
Using a fingernail, or an opening tool if you have one, **carefully** pull back on the white plastic to help the snap-fit clips to disengage.



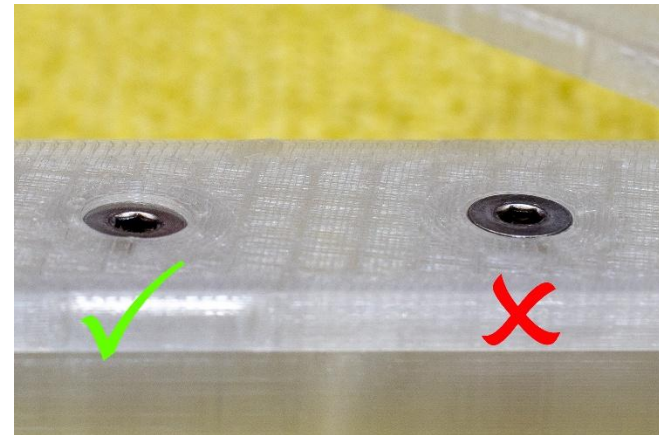
Do not remove the orange tape. This is insulating (Kapton) tape that protects the back of the circuit board in case the screws are not reinstalled correctly.



Remove the screws using a **2mm hex** screwdriver. This will release the mount. If you lose these screws, they are **M3x8 countersunk head** (8mm total length, including head).



Screw on the new mount. The heads of the screws should sit **just below (0.4mm)** the surface of the plastic. **Do not overtighten.**



Replace the translucent back by **carefully** pressing down until it snaps into place **all the way around**.

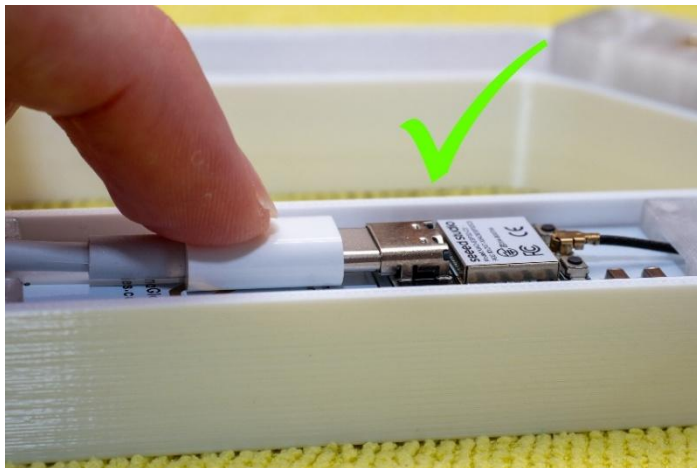


Changing the USB cable

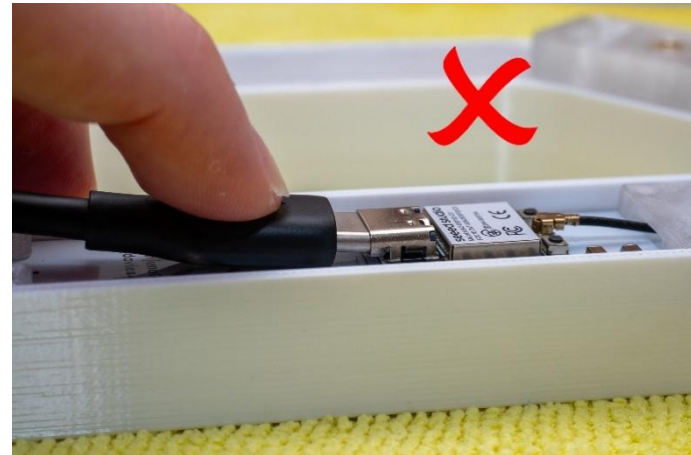
The sign uses a standard USB C connection & comes with a suitable USB cable preinstalled.

If you want to change the cable, please be careful – **you must use a cable with a slim connector.**

This white connector is okay, as it is slim enough to slide in with no resistance. White 'Apple style' USB C cables like this tend to have slim connectors.



This black connector is **not** okay. The plastic around it is too thick & it bottoms out on the circuit board, forcing it in at an angle. If you force a connector like this into the sign, it will damage the sign.



Securing the USB cable

You can secure the USB cable to the sign with a zip tie. This isn't strictly necessary & is a bit tricky, but the option is there if you ever replace the cable.

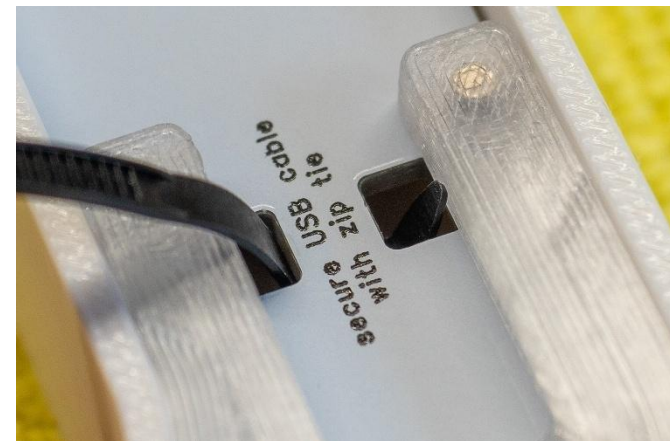
Start with a regular zip tie, something around 2.5mm wide is ideal.



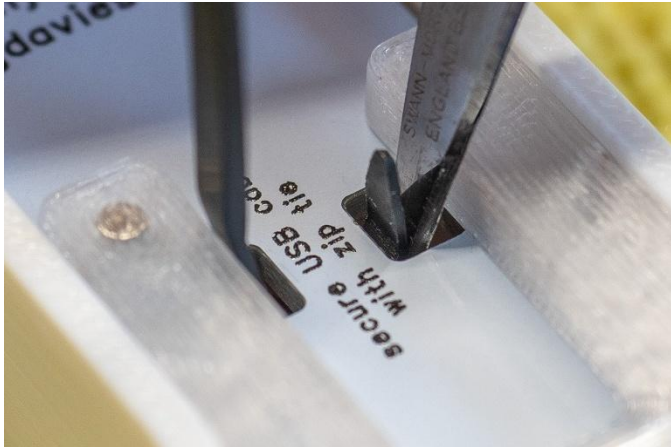
Bend the end of the zip tie twice.



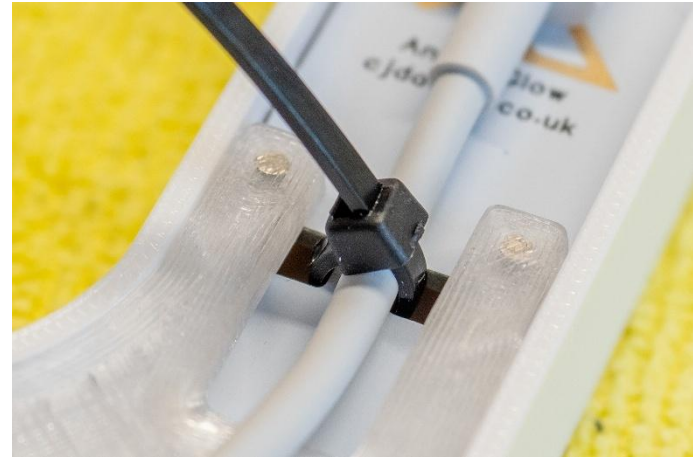
Hook it through one hole so that the end pokes out of the second hole.



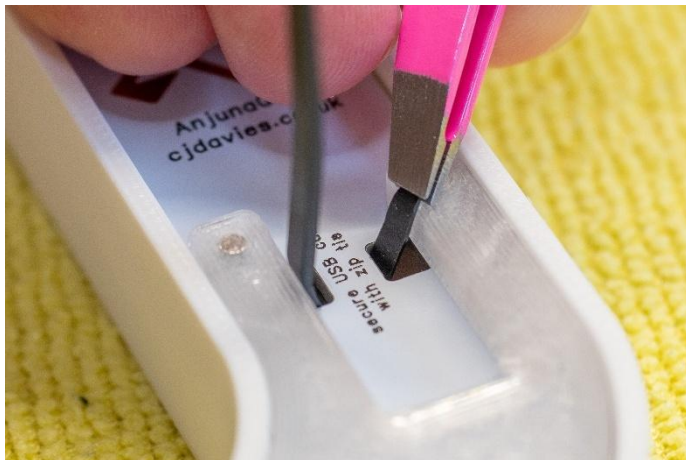
Pull the end through. You can carefully use the tip of a small knife...



Tighten the zip tie to secure the USB cable.



...or a small pair of tweezers, like eyebrow tweezers.

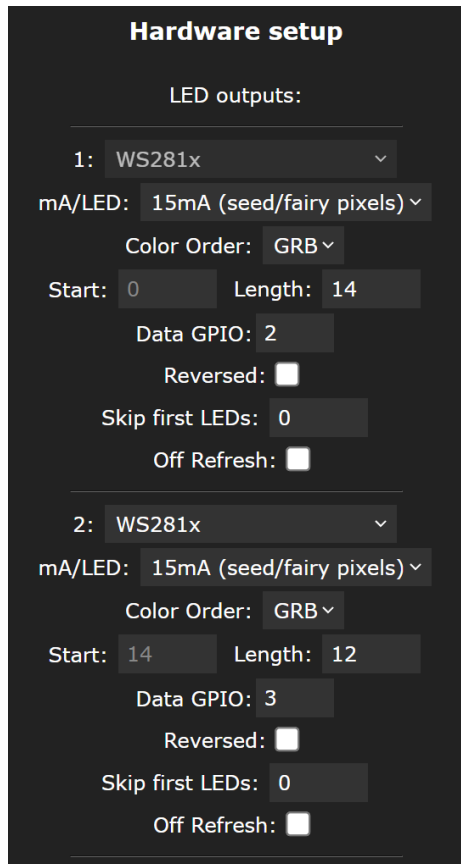


Snip off the remainder of the zip tie.



Recovery information

If for any reason you need to completely reset or reinstall WLED, the following is the crucial information you will need to make the sign work again.



The screenshot shows the 'Hardware setup' screen of the WLED software. It is divided into two sections for LED outputs. Output 1 is configured with WS281x LEDs, 15mA current, GRB color order, starting at pin 0 with a length of 14, using GPIO 2, and not reversed. Output 2 is also configured with WS281x LEDs, 15mA current, GRB color order, starting at pin 14 with a length of 12, using GPIO 3, and not reversed. Both outputs have 'Skip first LEDs' set to 0 and 'Off Refresh' disabled.

Hardware setup

LED outputs:

1: WS281x
mA/LED: 15mA (seed/fairy pixels)
Color Order: GRB
Start: 0 Length: 14
Data GPIO: 2
Reversed: ☐
Skip first LEDs: 0
Off Refresh: ☐

2: WS281x
mA/LED: 15mA (seed/fairy pixels)
Color Order: GRB
Start: 14 Length: 12
Data GPIO: 3
Reversed: ☐
Skip first LEDs: 0
Off Refresh: ☐

Note that the circuit uses 15mA WS2812C LEDs rather than the more common 55mA WS2812B LEDs.

You will also need to create the `ledmap.json` file with the following contents, **with no leading/trailing whitespace characters**.

```
{"map": [0,1,2,3,4,5,6,7,8,9,10,11,12,13,17,18,19,20,21,22,25,23,24,16,15,14]}
```

Full documentation for WLED is available from <https://kno.wled.ge/>

Environmental & Safety

The circuit board is RoHS compliant. Waste electronic equipment should be recycled according to local policies.

All plastic parts (the white front, the translucent back & all 3 types of mount) are made from PETG plastic, which can be recycled where facilities exist. Some household/kerbside plastic recycling can recycle PETG, however some will only recycle regular PET.

The sign contains small magnets, which can be dangerous to humans & pets if ingested.