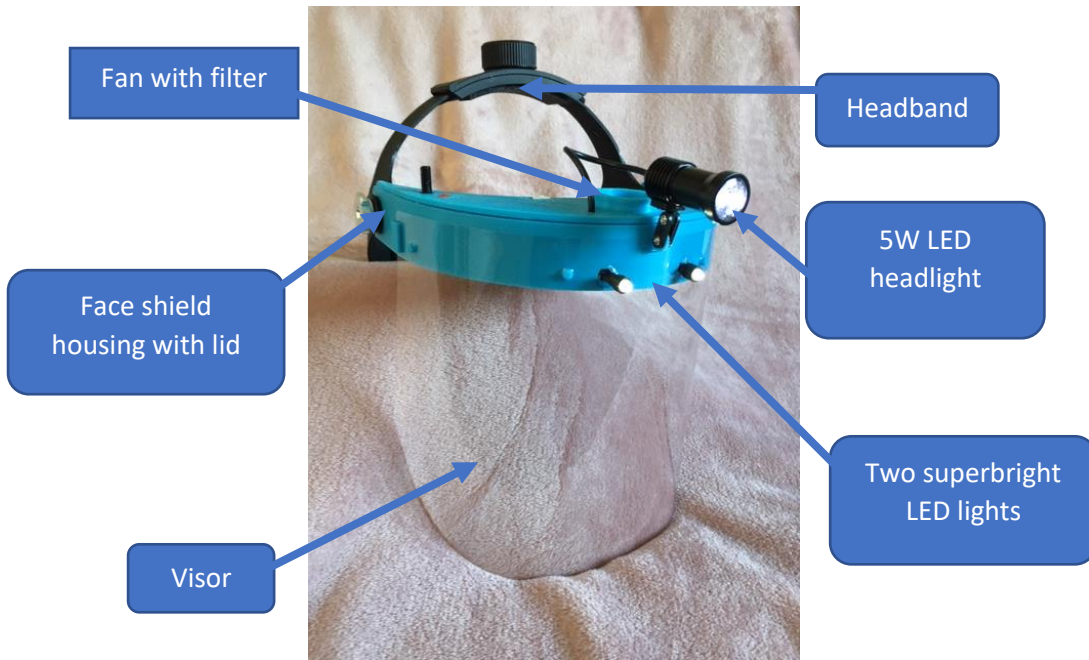


# OrangeDot Face Shield Version 2B Operations Manual- 4.10.2020



Thank you for agreeing to assess this face shield and provide feedback to enable product improvement. Every effort has been to ensure that this device is safe to use including rigorous testing. The electrical circuit has been checked by a professional electronics engineer.

**By taking part in this evaluation, you agree to indemnify the provider of this device against litigation which may result in injury to persons or property.**

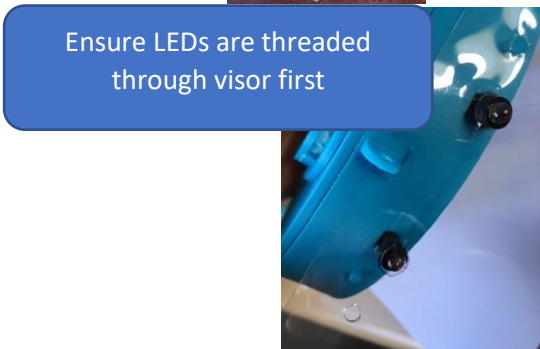
This device is not registered with the Australian Therapeutics Goods Administration since it is for general use and no claim for therapeutic use has been made. TGA approval may be sought before any commercial launch of this device.

- The device is powered by lithium ion batteries and there is a very small risk of overheating them during recharging. Please do not leave your device unattended during charging from the mains.



Protective film

- Please carefully attach the visor to the housing, ensuring that the LEDs are threaded through their holes first. The edge of the visor should be tucked into the side visor support. Remember to remove the protective film from the visor **if it is present** or vision will be blurred.



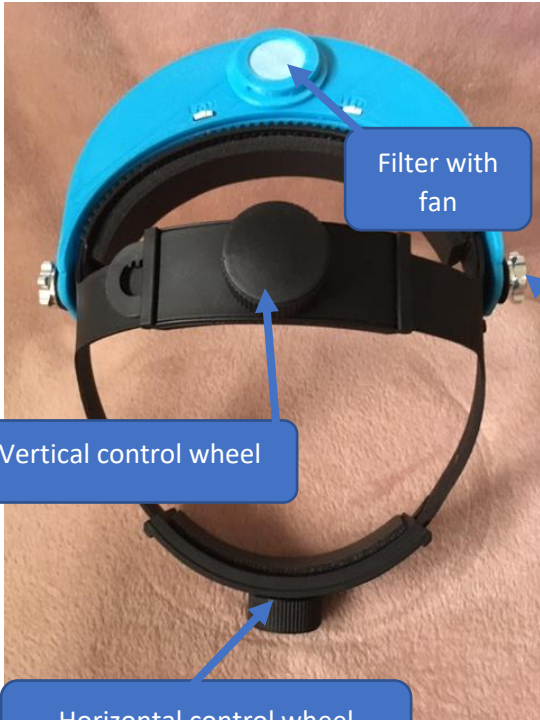
Ensure LEDs are threaded through visor first



Visor retainer

Visor side support

Aluminium wheel- allows rotation of the housing and visor

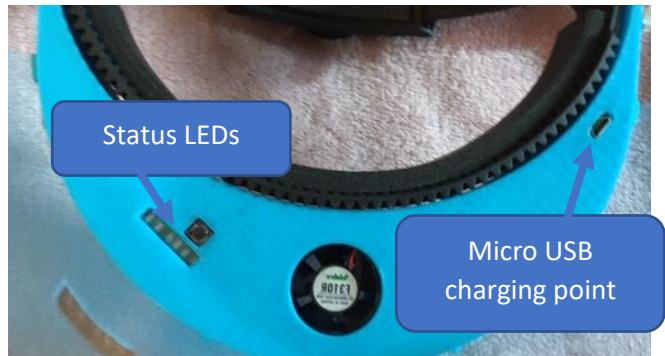
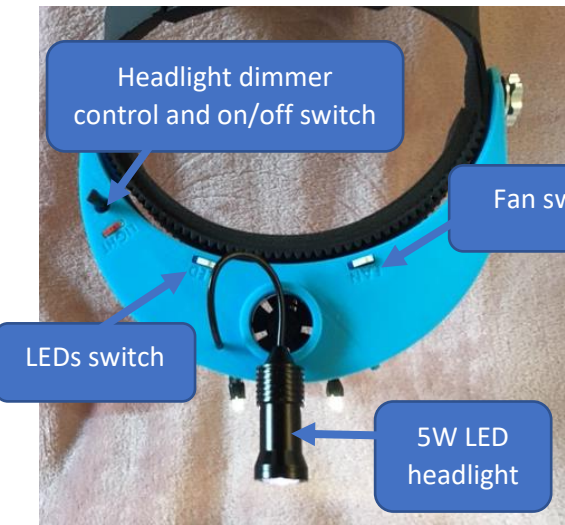


- Adjust the vertical and horizontal headband black control wheels, so that the shield fits comfortably on your head. Some extra sticky pad cushioning material is provided for you to cut and place where needed.
- The Aluminium wheel on the side of the faced shield allows for vertical movement of the housing and visor for direct vision.
- The control switches for the fan and LED lights are marked.

Aluminium control wheel

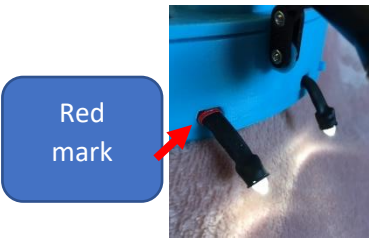
- Please do not lie the face shield on the visor- this will cause creases in the visor and the shield may fall under its own weight

Please DO NOT rest face shield on visor



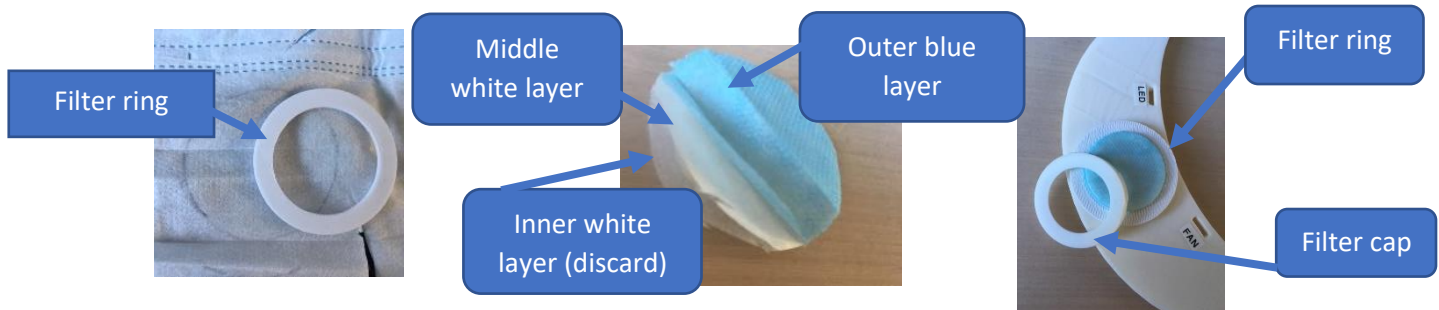
- The 5W LED headlight has a dimmer control and on/off switch. Please note, the dimmer does not cut the current completely- use the red switch for this.
- The two small LEDs and fan have their own control switches.

- The red LED status light remains on when using the fan.
- Note that the small LED lights are tightly held within the housing. They may be gently pulled forward and bent to allow for focusing of the light beams. Please do **not** rotate the LEDs and do **not** pull them out further than the red mark. **Stop before the red mark.** The LEDs can be retracted back into the housing if they are not needed.



- The filter is used to prevent aerosols from contaminating the operator's eyes. It is assumed that the operator is already wearing a face mask. The filter cap can be gently snapped out if the filter needs to be changed. Extra filters are provided for your convenience.

- To make extra filters, cut a face mask (ideally a Level 3 face mask- see frequently asked questions) using the filter ring as a template. Most face masks have three layers. The top layer blue layer is a moisture barrier. The middle white layer is to prevent microbial penetration.
- The lower white layer is for sweat absorption and comfort for the wearer. Obviously, the mask is not being worn, so discard the inner layer. This will also allow better air flow through the shield.



- The fan is for cooling and to reduce condensation on the visor.
- If fully charged, the fan and LED lights will work continuously for 5 hours. The lights will fade and the fan will become slightly noisier once the voltage drops at the end of a 5 hour cycle.
- Please use the provided thick black micro USB cable to charge the device. The device may be worn and recharged with the lights and fan working, but it is recommended to use a 5V power bank (rather than a mains charger) and the thinner grey micro USB cable.

#### Battery level indicator



Red= batteries charging; Blue= batteries charged; Green = battery capacity, 4 green LEDs= 100%

- A battery level indicator and charging status window are provided.
- A 5V mains charger may be used if the shield is being recharged while not being used.
- Recharging the batteries takes about 3 hours.
- The device can be cleaned and disinfected using soap and warm water soaked on a disposable tissue or isopropyl alcohol. Other harsh disinfectants may cause staining and corrosion.
- It is **not** recommended that the operator undertakes any maintenance of the device. Opening the lid should only be required if undertaking the cleaning of the fan or removing the batteries. The lid snaps open but is quite tight.
- Please do not place anything inside the air outlet or inlet holes while the fan is in operation.

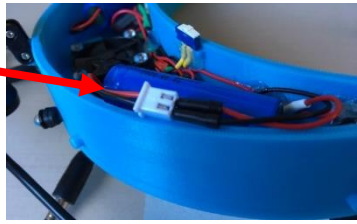
#### **If you find that the face shield is too heavy, consider removing one or both batteries.**

- Turn fan and LED lights off using their switches
- Gently snap the lid off the main housing by lifting the two corners of the crescent shaped lid.
- Gently remove one or both blue rechargeable batteries

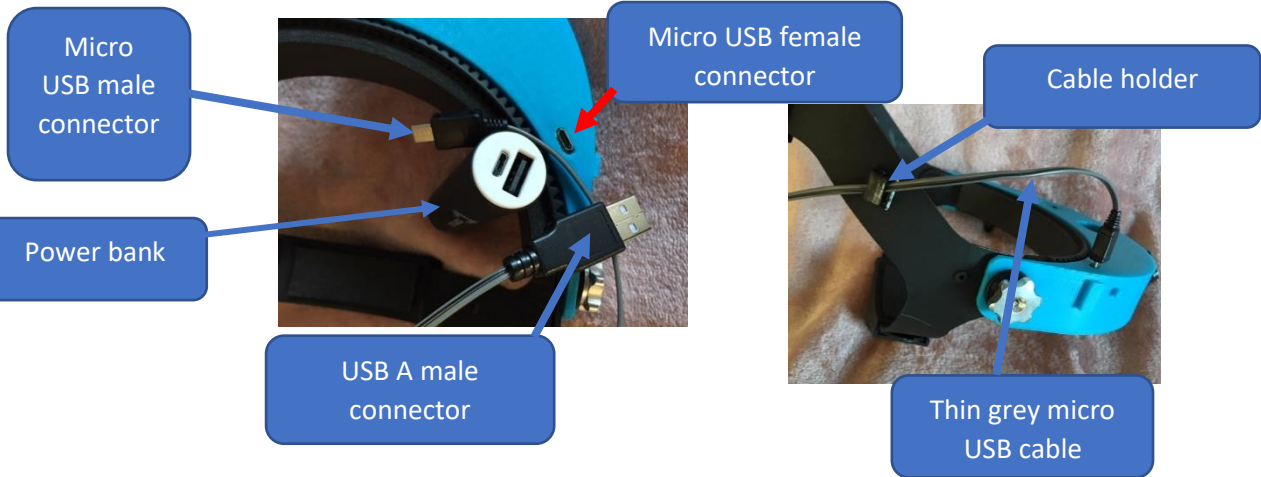


Pin connections- colour coded Red= positive, Black= negative

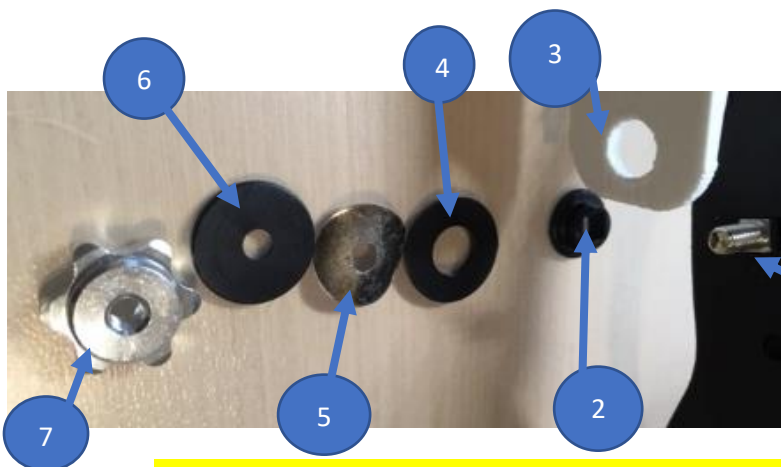
Battery retained by Velcro



- Replace the lid, making sure that you align the switches in their individual holes in the lid
- Ensure that the lid snaps into the housing
- If both batteries have been removed, you will have to provide power via the enclosed power bank
- Connect the **thin grey** micro USB cable provided to the female connector on the inferior surface of the housing
- Connect the larger USB A end to the power bank
- Attach the cable to the holder on the headband
- The power bank can be placed in your pocket
- The power bank should power the fan and LEDs continuously for over 3 hours if it is fully charged.
- The **thick black** micro USB to USB A cable can be used to charge the power bank



- Sequence for fixing the housing to the headband, if necessary: connect 1 to 2; 2 to 3..etc



1. Headband with metal retaining bolt
2. Black raised plastic washer
3. Face shield housing with hole
4. Black washer large hole
5. Aluminium metal disk with hole
6. Black washer with small hole
7. Aluminium wheel

Any questions? Please email [admin@orangedot.com.au](mailto:admin@orangedot.com.au)