



## Oculus Quest Battery Counterweight

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## Overview & Materials

Here's a simple & easily reversible mod to **extend** Oculus Quest's **play time** while also making it **more comfortable** to wear. By attaching a USB battery pack to the back of the Quest, you'll get more time for lightsaber dancing plus a counterweight to balance that bulky HMD strapped to your face. Lovely.

In addition to an **Oculus Quest VR headset**, you'll need the following items ...

### USB Battery Pack



USB Battery Pack for Raspberry Pi - 10000mAh - 2 x 5V outputs

\$39.95  
IN STOCK

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A **10,000mAh battery pack** (<https://adafru.it/IBk>) provides a substantial amount of extra run time, plus enough weight (~oz) that I was able to loosen the Quest side straps and not rely exclusively on clamping force to keep the Quest on my head.

### Heavy Duty Adhesive Velcro Tape



This **adhesive velcro-brand tape** (<https://adafru.it/IBI>) can be made from standard hook & loop material, as long as it has **strong adhesive** that sticks to the battery pack's textured plastic case. I had this **unusually wide roll** (<https://adafru.it/IBI>) left over from another project, but **only** a couple of **2cm-wide strips** are needed.

## Velcro Cable Ties



[Hook & Loop / Velcro ties \(https://adafru.it/IBm\)](https://adafru.it/IBm) are great for tidying up wiring and more. Make sure your ties are **compatible** with the Heavy Duty Adhesive Tape you use. We'll need the two types to stick together in order to suspend the battery pack from the Quest.

## USB Cable



USB cable - USB A to Micro-B

\$2.95  
IN STOCK

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Micro B USB to USB C Adapter

\$1.25  
IN STOCK

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To connect the battery pack to the Quest, you'll need a **USB-A to USB-C** cable or perhaps a common cable type along with an adapter. I used a basic **USB micro B** cable along with a **micro B to USB-C** adapter. We'll only need power connections, so we don't need to be too choosy.



## Assembly

Attach adhesive velcro to battery



Cut two **5cm x 2cm** strips of **fluffy side** heavy duty velcro tape. These will be placed on the **top side** of the battery pack – this is the side with 4 small holes on it.



Peel the protective sheet off of each piece and **stick** them to the **top side** of the battery pack in **parallel**. Placing them closer to the outer edges will provide more stability, but be sure not to cover the pack's indicator LEDs – they're quite helpful :)

Attach battery pack to Quest



Line the cable ties up with the adhesive tape on the battery pack and press them securely in place. Ensure the rough/hook side of the cable ties attach to the fluffy loop strips on the top of the battery pack.



Position the battery pack against the Quest's **back-bottom strap** with the pack's USB ports **pointed to the left** side.

Bring the long end of the ties around the strap, and pass them each through their respective eyelets. Pull them both **tight** and press in place to secure.

## Connect USB

Connect the USB cable's USB-A connector to the battery pack.



Gather any extra cable slack in a loop and secure it to the Quest's left side strap using another cable tie.



Plug the USB-C end of your cable into the Quest's left side port. You're now ready for your next marathon VR session.

Because the battery pack counters the weight of the head-mounted display, you should be able to **loosen the Quest's side straps** a bit, without any risk of it falling off. This will reduce the amount of pressure applied to your face and increase comfort – always a good thing :)

