🗔 **LucidVR** / **lucidgloves**   ⬭ Public

Code	Issues 6	Pull requests 3	Actions	Projects	**Wiki**	Security	Insights

Prototype 4 Parts List

Edit   New page   **Jump to bottom**

Lucas LucidVR edited this page on 25 Jan · 7 revisions

These are the parts you will need for prototype 4 with recommended links to buy (make sure you get the right ones)
Currently, these are US links, but I will hopefully have UK/EU options later on.

Keep in mind that prices for these parts change a lot, and some of these links are higher quantity, so if you want to reach the $60/pair mark you may need to shop around.

1. b10k ohm Potentiometer (5x per hand)

   - You will also need the nuts that are included with the potentiometers.
   - Green or WL potentiometers are supported.
   - WL (brass) potentiometers:
     - Recommended Amazon Link
     - Recommended Aliexpress Link
   - Green Potentiometers (Smaller and more durable):
     - Recommended Amazon Link
     - Recommended Aliexpress Link (10K Ohm)

2. 9g servo motors for haptics(5x per hand)

   - Make sure they are 180-degree range.
   - MG90S servos are recommended for higher durability
     - Recommended Amazon Link
   - SG90 servos can also be used as a cheaper alternative
     - Recommended Amazon Link
     - Recommended Aliexpress Link

3. ESP32 Dev Board or Arduino (1x per hand)

   - Recommended Board Types:
   - ESP-WROOM-32
     - Recommended Amazon Link

- - [Recommended Aliexpress Link](#)
  - ESP32-WROOM-32U (For external antenna)
    - [Recommended Amazon Link](#)
    - [Recommended Aliexpress Link](#)
  - Arduino Nano (No bluetooth)
    - [Recommended Amazon Link](#)
    - [Recommended Aliexpress Link](#)
    - If not using BT, may need a long USB cable to connect your arduino to your computer if you don't have one

4. Cheap retractable badge reels (for the rotary springs, 5x per hand)

   - [Recommended Amazon Link](#)

5. Glove material of your choice.

   - Recommended: Nylon Inspection Gloves (more flexy), Cycling/Golf gloves (stronger, easier to put on)

6. Mounting material

   - Velcro strap for the rigid mount (could add elastic as well), or elastic only

7. Wiring/Connectors/Breadboards as needed.

   - I recommend crimping/using JST connectors, 5 pin JST-XH 2.54mm fit great on the potentiometers.
   - [A great first crimper set (optional, sometimes $35)](#)
   - If you're in a pinch you can probably get away with soldering straight to the potentiometers, or using pre-crimped dupont wires from arduino kits.

8. Highly Recommended: A Can of WD-40 to lubricate the potentiometers

   - This makes the pots feel 10x smoother.
   - WD-40 is flammable so spray at your own risk.
   - Potential alternatives: (UNTESTED) Deoxit, Triflow

9. A source of power for the servos

   - Ideally 5v 2+ amps
   - This can be anything from a phone charger brick, to a USB battery, or even 4x AA batteries.
   - If you are using bluetooth you may want to invest in a separate clean source of power for the ESP32 to prevent brownouts.
   - [A Personal Favorite Choice](#) (Pack of 2)

10. If using the rigid mount, a nice squishy sheet of foam

+ Add a custom footer

▸ **Pages** 18

Getting Started ✏

Parts Lists:

- Prototype 3
- Prototype 4

Printing guides:

- Prototype 3
- Prototype 4

Wiring Diagrams:

- Prototype 3
- Prototype 4

Build Guides:

- Prototype 3
- Prototype 4

Firmware Guides:

- Firmware V2 Customization
- Firmware Troubleshooting Guide

Community Design List

Troubleshooting

Clone this wiki locally

https://github.com/LucidVR/lucidgloves.wiki.git