1. What frequency/wavelength would be best?
   1. Ensure beam strength over roughly 1km 🡪 what power?
   2. Analog frequency detector circuit
   3. Charging capacitor to measure time
2. What optics?
   1. How much magnification for ~1km?
   2. Any techniques for aligning the laser?
   3. Where could I get lenses and how do I order them?
3. Circuitry
   1. Any experience with frequency detecting ICs? RESEARCH CIRCUITS
   2. Any experience with measuring TOF?
      1. What capacitor size or are there other specifications I should consider?

Notes:

* Detector 🡪 opamp 🡪 filter 🡪 opamp

1. Illegal to use visible light, use 1550nm power unknown, look it up
2. Keep measuring baseline in background, magnify maybe but will lose power with more lenses
3. Keep optics simple
4. Laser diverges, must focus it to avoid spotlight effect
5. Collimate light (two lenses basically a telescope) specific to IR
6. AR coating might be useful
7. Thorlab and Newport and cvi laser and melles griot
8. First two have detectors but expensive

AR headset