* Build Cost: Under $60
  + Wood For Project:

**-** [Burill Fir Stud](https://www.homedepot.com/p/2-in-x-4-in-x-96-in-Premium-Burrill-Fir-Stud-1000020053/206262176) (96in X 4in X 2in) - $4.42

* + Possible 3D pieces:

**-** Handle

**-** Tip of barrel (Orange tip to classify as fake firearm)

**-** Top of bottom casing & Bottom of top casing (smoother sliding motion)

* Mechanics Cost: About/Under $100
  + [1] [Cyclical Actuator](https://www.amazon.com/BEMONOC-Reciprocating-Actuator-Adjustable-Optional/dp/B0834ZJ5JM/ref=sr_1_5?crid=25M4CIM688E1J&keywords=reciprocating+linear+actuator+small+12V&qid=1666888899&sprefix=reciprocating+linear+actuator+small+12v%2Caps%2C78&sr=8-5) - $37.88 per Actuator
  + **Battery Pack + Cables:** 
    - [1] [Battery Pack](https://www.amazon.com/TalentCell-Rechargeable-12000mAh-Multi-led-indicator/dp/B00ME3ZH7C/ref=sr_1_4?crid=27D5W82P9MUML&keywords=12v+battery+pack&qid=1666889018&qu=eyJxc2MiOiI1LjU1IiwicXNhIjoiNC4wNyIsInFzcCI6IjMuNDcifQ%3D%3D&sprefix=12v+battery%2Caps%2C95&sr=8-4) - $39.99
    - [1] [Cables](https://www.amazon.com/SIM-NAT-Pigtails-Security-Surveillance/dp/B01GPL8MVG/ref=sr_1_10?crid=3IKTLNO40GUKJ&keywords=1ft+12v+dc+cable+wire+with+plug&qid=1668103503&sprefix=1ft+12v+dc+cable+wire+with+plug%2Caps%2C102&sr=8-10) - $7.99
  + [Actuator motor controller](https://www.amazon.com/AITRIP-BTS7960-Driver-Arduino-Current/dp/B08HLX7H31) - $13.59
  + [Limit Switch](https://www.amazon.com/MXRS-5-5cm-Momentary-Button-Switch/dp/B07ZVJD1GC/ref=sr_1_4?crid=10UJ1OHVUM7I&keywords=limit+switch+12v&qid=1667323527&qu=eyJxc2MiOiI0Ljc1IiwicXNhIjoiNC41NCIsInFzcCI6IjQuMzcifQ%3D%3D&sprefix=limit+switch+12v%2Caps%2C92&sr=8-4) (For Trigger) - $6.99
* Computer Architecture Cost: About $175
  + Main Board: [1] 32-bit [Arduino Due](https://store.arduino.cc/products/arduino-due) - $48.50
  + [1] [Bluetooth LE HM-10](https://www.amazon.com/DSD-TECH-Bluetooth-iBeacon-Arduino/dp/B06WGZB2N4) - $10.99
  + [1] [MPU6050](https://www.amazon.com/HiLetgo-MPU-6050-Accelerometer-Gyroscope-Converter/dp/B00LP25V1A) IMU - $9.99
  + [5v Voltage Regulator](https://www.amazon.com/L7805CV-Positive-Voltage-Regulator-Package/dp/B01M32I31S) - 9.85
  + **~~Light Sensor~~** ~~- $88.63~~
    - ~~[20]~~ [~~TS4321~~](https://triadsemi.com/product/ts4231/) ~~(IR Light to DC) - $29.84~~
    - ~~[Need 20] IR Photodiodes~~
      * ~~[2] Option 1:~~ [~~Pack of 15 Emitters and 15 Receivers~~](https://www.amazon.com/Cylewet-Infrared-Emitter-Receiver-Arduino/dp/B06VY25N8J) ~~- $5.99~~
      * ~~[2] Option 2:~~ [~~20 Receiver~~](https://www.amazon.com/uxcell-Photosensitive-Photodiodes-Sensitive-Receiver/dp/B07VS3FLLF) ~~- $6.49~~
      * ~~[1] Option 3:~~ [~~Pack of 50 Emitters and 50 Receivers~~](https://www.amazon.com/XLX-Infrared-Emission-Receiver-Arduino/dp/B01MFCFLA7) ~~- $10.99~~
      * ~~[20] Option 4:~~ *~~Cad Friendly!~~* ~~Valve Recommended~~ [~~BPW34S~~](https://www.mouser.com/ProductDetail/Vishay-Semiconductors/BPW34S?qs=RzxYCzJDjPXfPQ7CnEzYMQ%3D%3D) ~~- $19.12~~
    - ~~Other electronic components~~
      * ~~[20] 1 uF Capacitor - $0.30~~
      * ~~[20] 0.1 uF Capacitor - $0.30~~
      * ~~[20] 15k Resistors - $0.30~~
    - ~~Use JLCPCB for manufacturing~~
* Misc.
  + **Wires???**
* Total cost: $325