**Wrist mounted rig**

Parts:

* 2@ #2 wood screws
* 2@ #6 1/2" bolts
* 5@ #6 4" bolts
* 4@ #6 nylon insert lock nuts
* 2@ [SG90 servo motors](http://www.ebay.com/sch/i.html?_odkw=sg90&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.Xsg90+-axis.TRS0&_nkw=sg90+-axis&_sacat=0). Each comes with 2 servo mounting screws, a servo horn, and a horn screw

Model:

* 2@ Servo arms
* 2@ Hinge arms
* 2@ Hinge mounting plate
* 2@ Servo mounting plate
* 3@ Wrist side central spacer
* 4@ Wrist side plate spacer
* 2@ Keyboard side servo spacer
* 2@ Keyboard side hinge spacer
* 1@ Keyboard mount

**Servo controller and proximity detector**

Parts:

* 1@ Controller
  + [Arduino Pro mini](http://www.ebay.com/sch/i.html?_odkw=sg90+-axis&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR12.TRC2.A0.H0.Xarduino+pro+mini.TRS0&_nkw=arduino+pro+mini&_sacat=0). A [USB↔Serial adapter](http://www.ebay.com/sch/i.html?_odkw=arduino+micro+leonardo&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR4.TRC2.A0.H0.Xarduino+ftdi.TRS0&_nkw=arduino+ftdi&_sacat=0) is also necessary but not permanently installed
  + OR
  + An [Arduino Micro](http://www.ebay.com/sch/i.html?_odkw=arduino+pro+mini&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.Xarduino+micro+leonardo.TRS0&_nkw=arduino+micro+leonardo&_sacat=0) could be used which doesn't require a USB↔Serial adapter
* 1@ Protoboard or [stripboard](http://www.ebay.com/sch/i.html?_odkw=protoboard&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR6.TRC2.A0.H0.Xstripboard.TRS0&_nkw=stripboard&_sacat=0)
* 1@ 10K linear potentiometer
* 6@ [Straight header pins](http://www.ebay.com/sch/i.html?_odkw=40pcs+header+pins&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.A0.H0.X40+header+pins.TRS1&_nkw=40+header+pins&_sacat=0)
* 4@ [2 position screw terminals](http://www.ebay.com/sch/i.html?_odkw=scew+terminal+pcb&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.Xscrew+terminal+pcb.TRS0&_nkw=screw+terminal+pcb&_sacat=0)
* 1@ [USB micro breakout board](http://www.ebay.com/sch/i.html?_odkw=screw+terminal+pcb&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR1.TRC0.A0.H0.Xmicro+breakout.TRS0&_nkw=micro+breakout&_sacat=0)
* 4@ #6 black screws
* 1@ #6 3/4" bolt
* 1@ #6 nut
* 2@ #6 nylon washers
* 1@ [5mm RGB LED](http://www.ebay.com/sch/i.html?_odkw=rgb+led+20pcs+5mm&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.A0.H0.Xrgb+led+5mm.TRS1&_nkw=rgb+led+5mm&_sacat=0)
* 1@ [TSAL6100](http://www.ebay.com/sch/i.html?_odkw=rgb+led+5mm&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR12.TRC2.A0.H0.Xtsal6100.TRS0&_nkw=tsal6100&_sacat=0)
* 1@ [TSOP4856](http://www.ebay.com/sch/i.html?_odkw=tsal6100&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR7.TRC2.A0.H0.Xtsop4856.TRS0&_nkw=tsop4856&_sacat=0)

Model:

* Enclosure
* Lid
* Emitter-receiver tube
* Wrist slip

Code:

* <https://codebender.cc/sketch:176329>

**Keyboard**

Parts:

* 1@ [Arduino Micro](http://www.ebay.com/sch/i.html?_odkw=arduino+pro+mini&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.Xarduino+micro+leonardo.TRS0&_nkw=arduino+micro+leonardo&_sacat=0)
* 1@ [Adafruit EZ-Key Bluefruit](https://www.adafruit.com/products/1535)
* 1@ [ADXL335 breakout board](http://www.ebay.com/sch/i.html?_odkw=ez-key+bluefruit&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR3.TRC2.A0.H0.XADXL335.TRS0&_nkw=ADXL335&_sacat=0)
* 1@ Protoboard or [stripboard](http://www.ebay.com/sch/i.html?_odkw=protoboard&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR6.TRC2.A0.H0.Xstripboard.TRS0&_nkw=stripboard&_sacat=0)
* 7@ [12mm tactile switches](http://www.ebay.com/sch/i.html?_odkw=12mm+tactile&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.X12mm+tactile+with+cap.TRS0&_nkw=12mm+tactile+with+cap&_sacat=0)
* 1@ [23A battery holder](http://www.ebay.com/sch/i.html?_odkw=12mm+tactile+with+cap&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR0.TRC0.H0.X23a+holder.TRS0&_nkw=23a+holder&_sacat=0)
* 1@ [USB micro breakout board](http://www.ebay.com/sch/i.html?_odkw=screw+terminal+pcb&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR1.TRC0.A0.H0.Xmicro+breakout.TRS0&_nkw=micro+breakout&_sacat=0)
* 1@ [USB micro male end](http://www.ebay.com/sch/i.html?_odkw=micro+breakout+male&_sop=15&LH_BIN=1&_osacat=0&_from=R40&_trksid=p2045573.m570.l1313.TR12.TRC2.A0.H0.Xmicro+USB+male.TRS0&_nkw=micro+USB+male&_sacat=0)
* 4@ #6 black screws

Model:

* Enclosure
* Lid

Code:

* <https://codebender.cc/sketch:155049>