**Control Documentation**

**Keyboard Functionality**

* Up arrow: pin 2 – tilt up
* Down arrow: pin 3 – tilt down
* Right arrow: pin 5 – pan right
* Left arrow: pin 4 – pan left
* Up key: pin 6 – height up
* Down key: pin 7 – height down
* Enter: pin 8 – reset all to home
* None: pin 9 – scans all directions

**Board Connections**

* Tilt servo: J16 pin 30
* Pan servo: J17 pin 31
* Height DC motor
  + Pin 10 – Enable (PWM)
  + Pin 11 – Direction
* Stepper motor
  + Pin 1 – 32
  + Pin 2 – 33
  + Pin 3 – 34
  + Pin 4 – 35

**Limit Switches – Pins go low when pressed**

* Top: Pin 36 -> 39 burned out
* Bottom: Pin 38

**On/Off switch**

* Connected to: Pin 37
* Pin is high when switch is turned off, goes to low when switch is on

**To Do**

* Top limit switch – make grounded
* Bottom limit switch – make grounded
* Show on website when physical switch is turned off
  + Check state of on/off pin then create an alert on submit

**Notes**

* Current color scheme
  + Light grey: #a3aaa1
  + Text color: #e4e7e4
  + Grey: #373A36 ->[#‎3A3A3C‬](https://www.facebook.com/hashtag/3a3a3c?source=feed_text&story_id=1994087474150103) -background
  + Light Green: #72B431 -> [#‎62A945‬](https://www.facebook.com/hashtag/62a945?source=feed_text&story_id=1994087474150103) ->home,up,down
  + Middle Green: # 1E7040 -> [#‎0F6A37‬](https://www.facebook.com/hashtag/0f6a37?source=feed_text&story_id=1994087474150103) ->rest
  + Dark Green: # 24543D ->#124734 ->text shadows

**Changes Made**