1   Equipment Needed

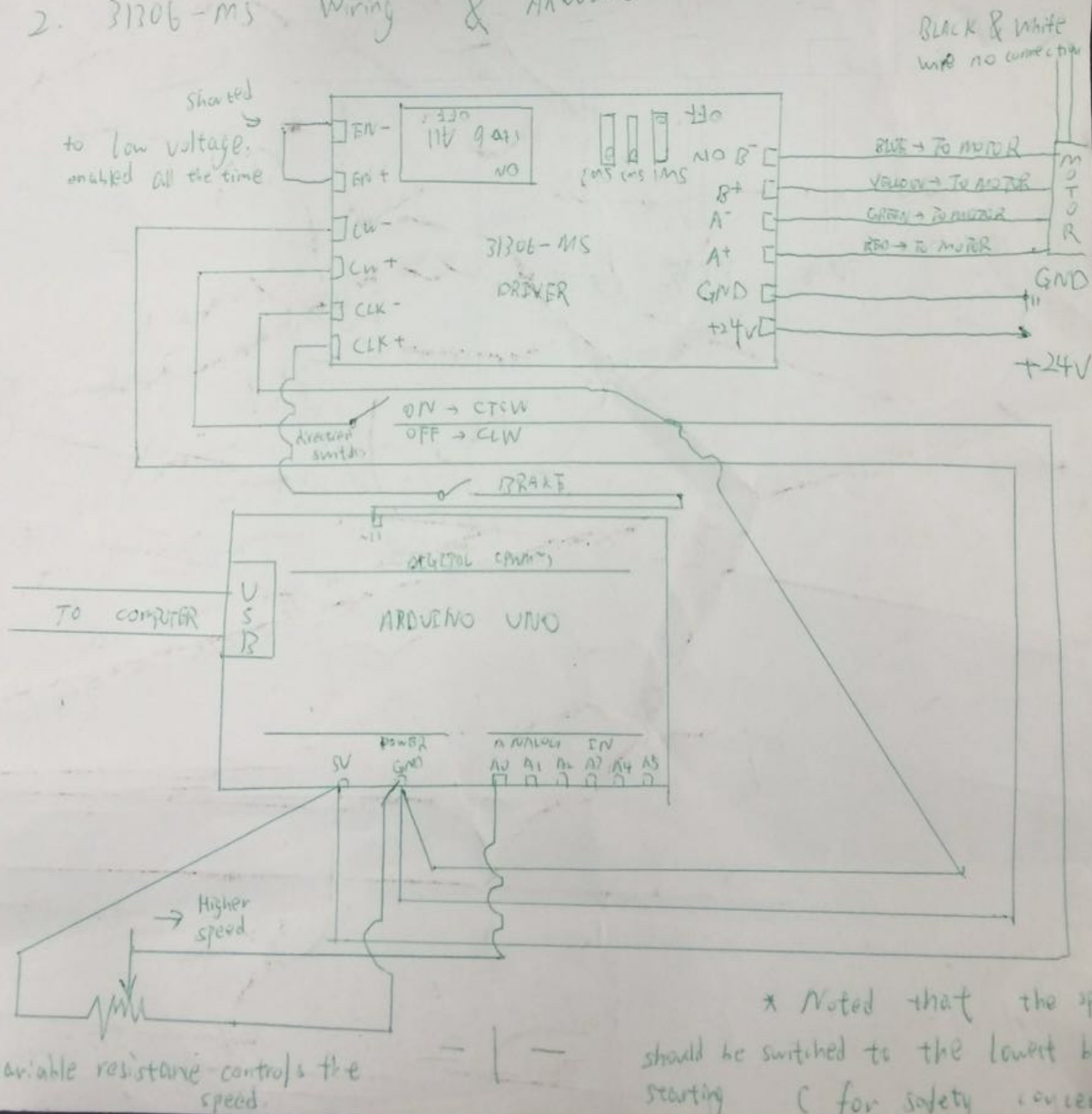1 — ARDUINO UNO   2. — 3I306-MS   iN full bridge stepmotor driver
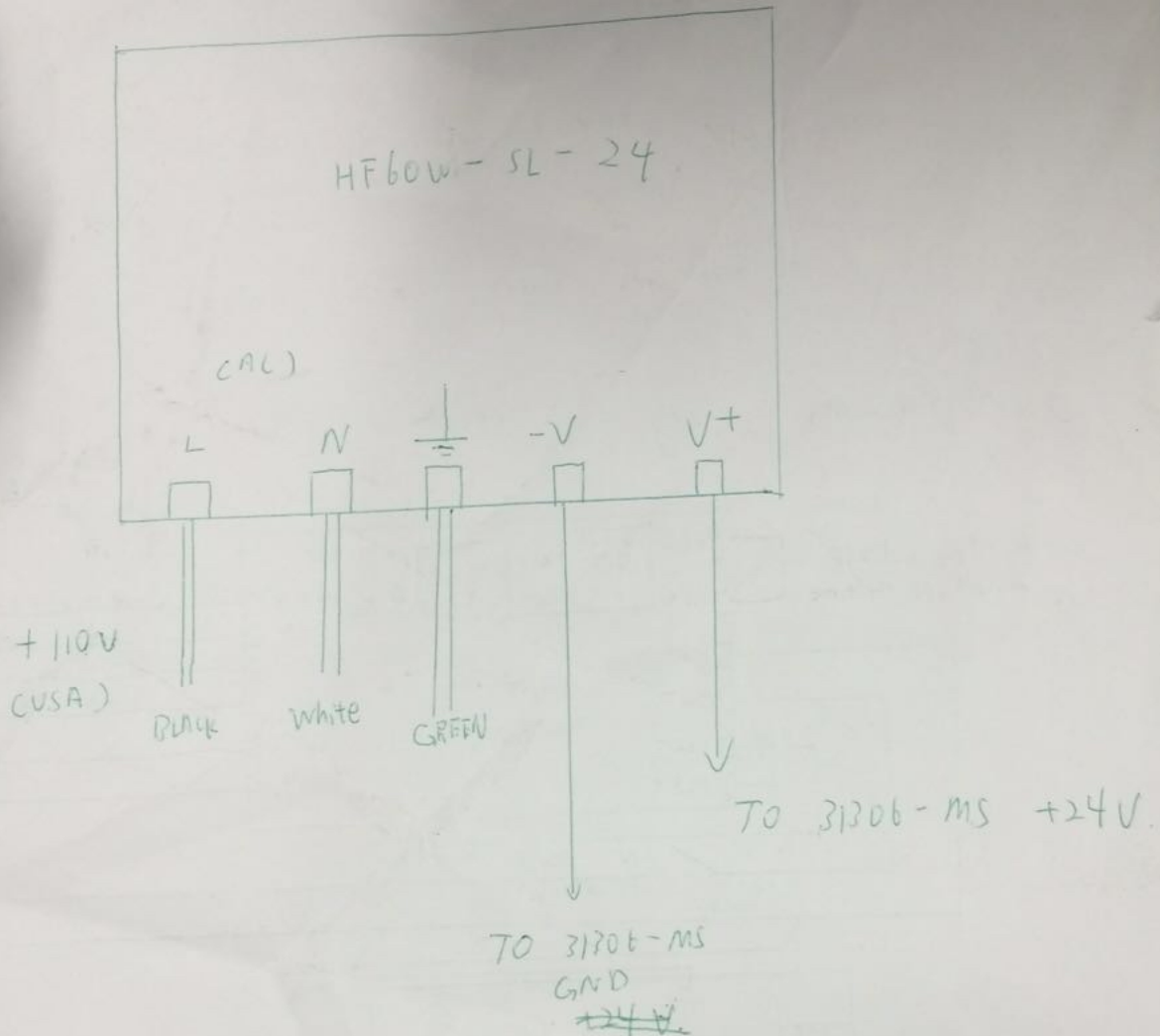
3. — Stepping motor 57BYGH213-25   4. HF60W - SL-24 switching power supply.

+ Breadboards , wires , switches (latching) , variable resistor

2. 3I306-MS Wiring & ARDUINO WIRING.

BLACK & white wire no connection

Shorted to low voltage, enabled all the time

EN−
EN+
CW−
CW+
CLK−
CLK+

3I306-MS DRIVER

NO B−
B+
A−
A+
GND
+24v

BLUE → TO MOTOR
YELLOW → TO MOTOR
GREEN → TO MOTOR
RED → TO MOTOR

MOTOR

GND
+24V

ON → CTCW
OFF → CLW

direction switch

BRAKE

DIGITAL CLK(?)

ARDUINO UNO

TO COMPUTER   USB

5V   GND   A0 A1 A2 A3 A4 A5

POWER   ANALOG IN

→ Higher speed

variable resistance controls the speed

* Noted that the speed should be switched to the lowest before starting (for safety concern)

3.   HF60W - SL - 24   Wiring

HF60W - SL - 24

(AL)

L   N   ⏚   -V   V+

+110V
(USA)
       BLACK   White   GREEN

                                              TO 31306-MS +24V.

                              TO 31306-MS
                              GND
                              +24V.

4. Arduino Running Code

```
void setup () {

Serial begin (9600);
pinMode (A0, INPUT);

}

void loop () {

double x = analogRead (A0);

double t = x / 10;

double a = analogRead (A1);    // Port settings here MUST

analogWrite (11, 255);         // Be identical to ur wiring.

delay (t);

analogWrite (11, 0);

delay (t);                     // JUST one of the speed controlling

}                              // Algorithms, not the best one.
```

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