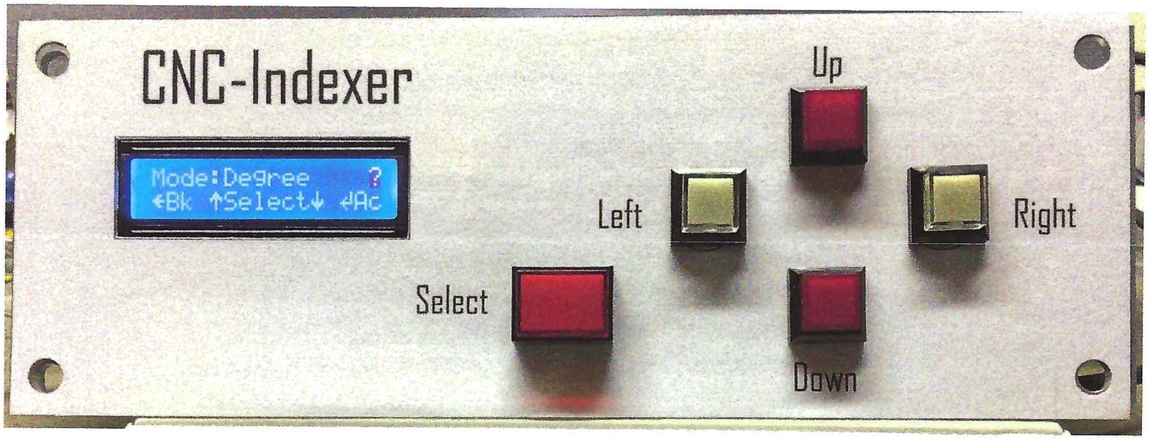
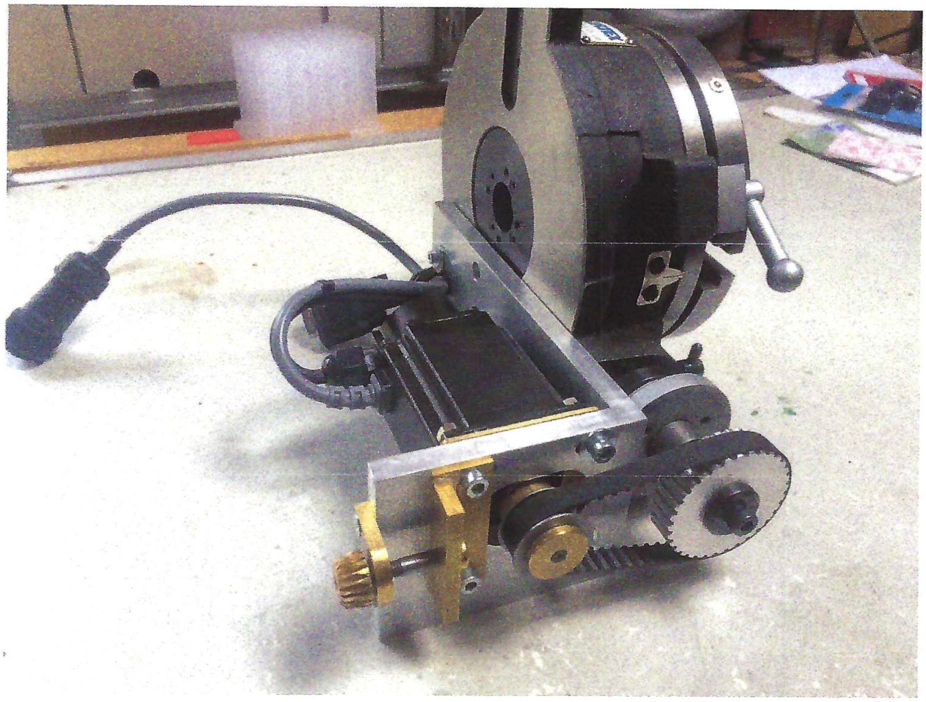
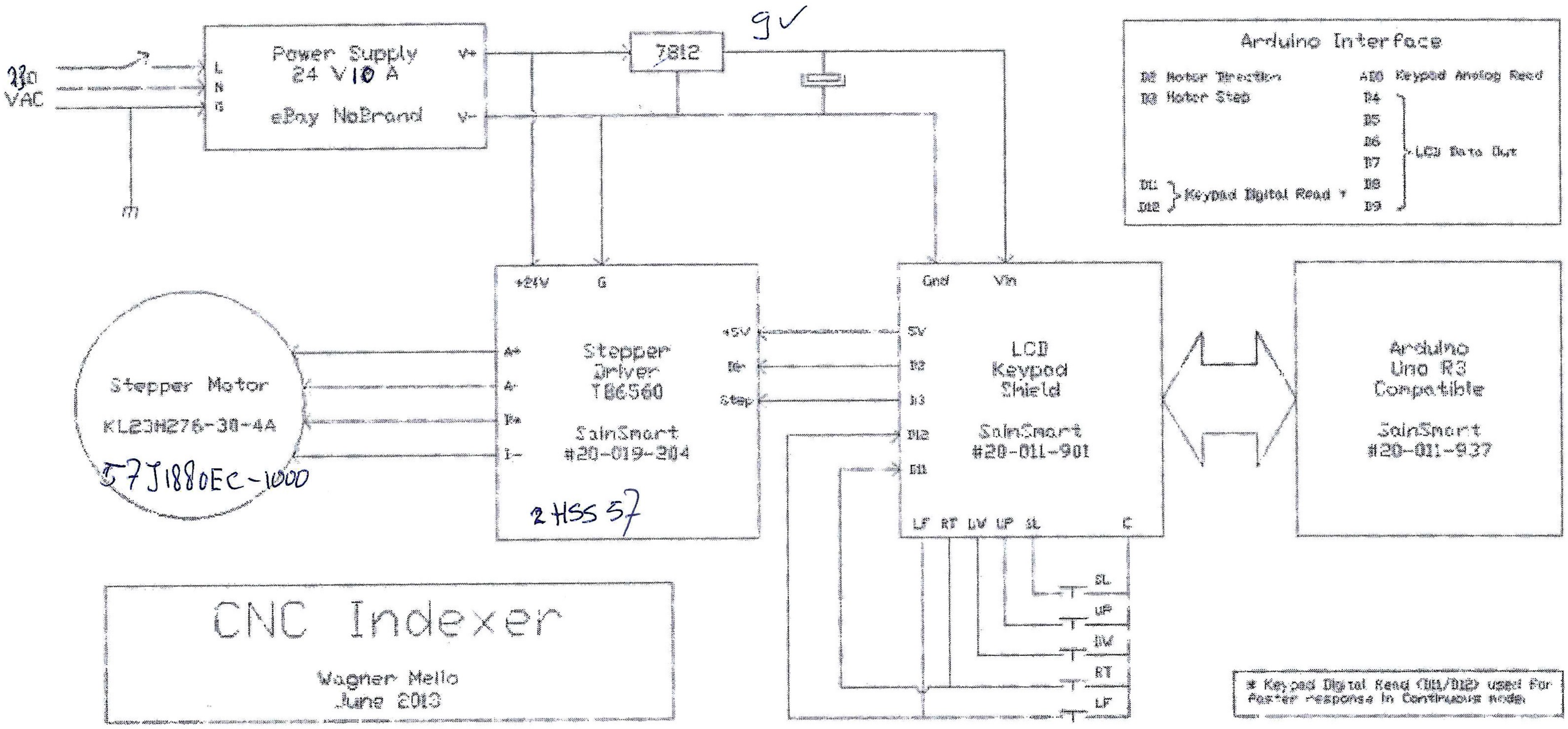
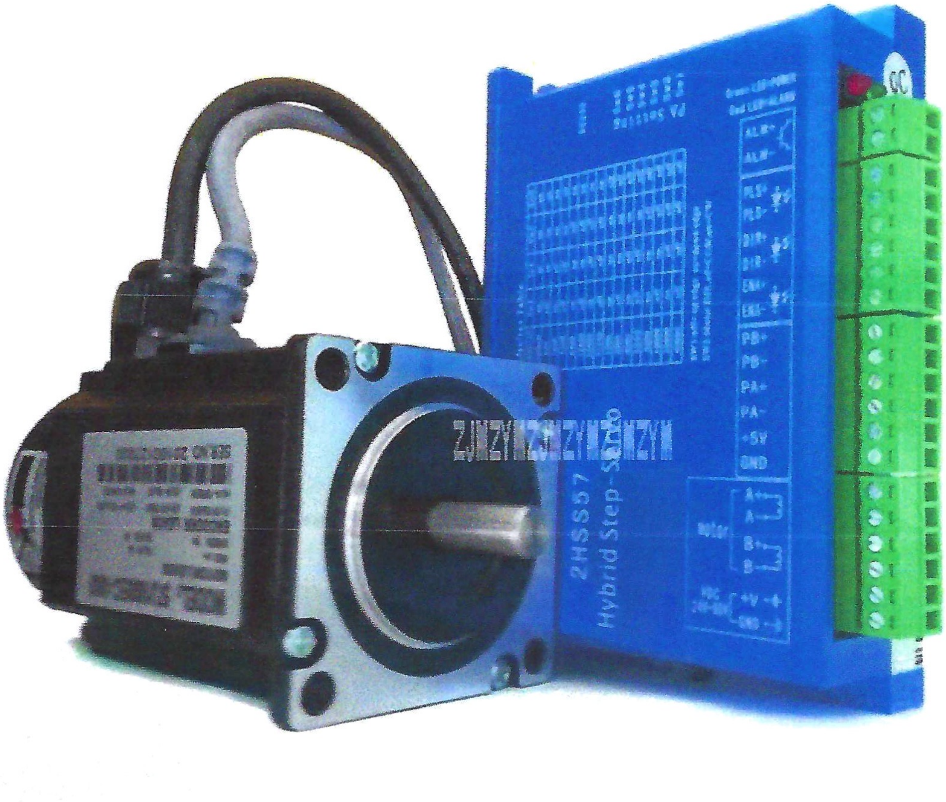
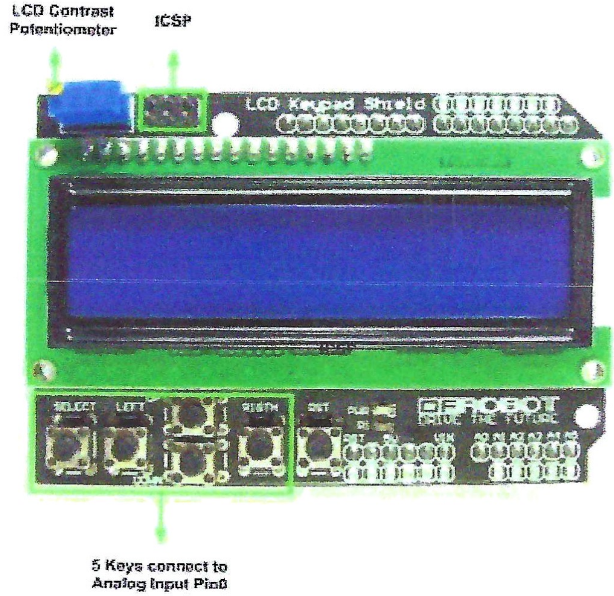

CNC-Indexer
Mode:Degree ?
←Bk ↑Select↓ ↵Ac
Up
Left
Right
Select
Down

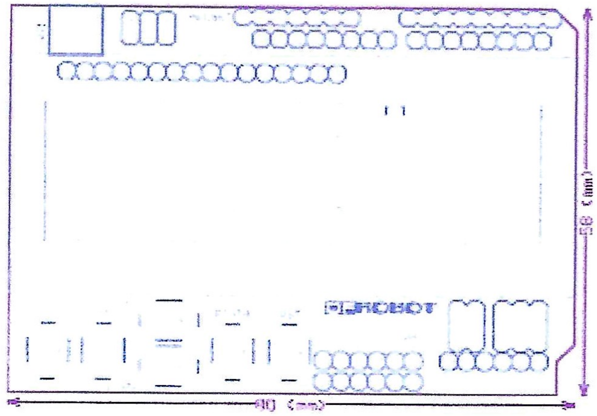



220 VAC
L
N
G
Power Supply
24 V 10 A
eBay NoBrand
V+
V-
7812
9V
+24V
G
Stepper Driver TB6560
SainSmart #20-019-204
2HSS57
+5V
Dir
Step
A+
A-
B+
B-
Stepper Motor
KL23H276-30-4A
57J1880EC-1000
Gnd
Vin
5V
D2
D3
D12
D11
LCD Keypad Shield
SainSmart #20-011-901
LF
RT
DW
UP
SL
C
Arduino Uno R3 Compatible
SainSmart #20-011-937
Arduino Interface
D2 Motor Direction
D3 Motor Step
D11
D12
Keypad Digital Read *
A0 Keypad Analog Read
D4
D5
D6
D7
D8
D9
LCD Data Out
CNC Indexer
Wagner Mello
June 2013
* Keypad Digital Read (D11/D12) used for faster response in Continuous mode.


MODEL: 57J1880EC-1000
MOTOR LEADS
ENCODER LEADS
SER NO 20160329111
CAUTION
DON'T SHOCK

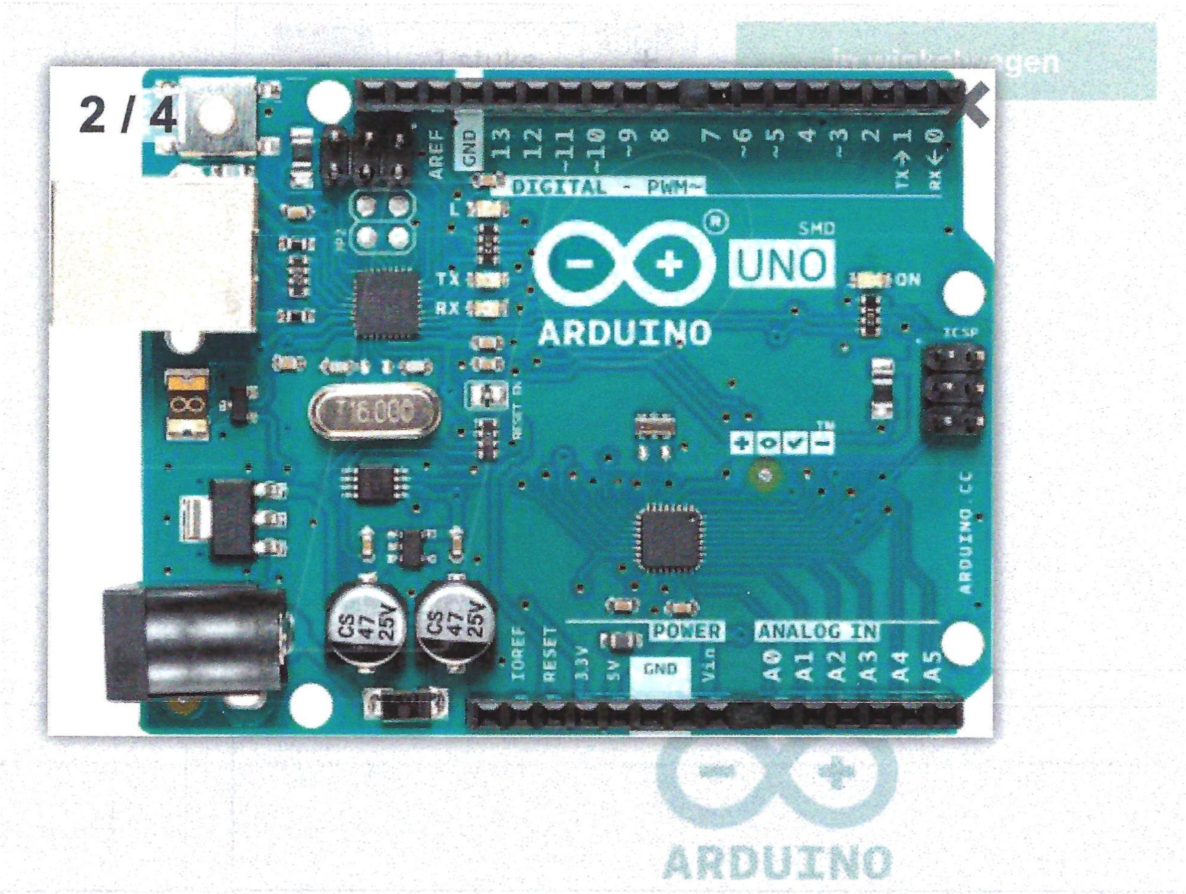

2HSS57
Hybrid Step-Servo
ALM+
ALM-
PLS+
PLS-
DIR+
DIR-
ENA+
ENA-
PB+
PB-
PA+
PA-
+5V
GND
motor
A+
A-
B+
B-
+V
GND





Pin Allocation

Pin	Function
Analog 0	Button (select, up, right, down and left)
Digital 4	DB4
Digital 5	DB5
Digital 6	DB6
Digital 7	DB7
Digital 8	RS (Data or Signal Display Selection)
Digital 9	Enable
Digital 10	Backlit Control


2 / 4
DIGITAL - PWM~
UNO
SMD
ON
ARDUINO
ICSP
TX
RX
L
T16.000
POWER
ANALOG IN
IOREF
RESET
3.3V
5V
GND
Vin
A0
A1
A2
A3
A4
A5
AREF
ARDUINO.CC
ARDUINO

CNC-Indexer | Arduino 1.8.19

CNC-Indexer

```
/********************************************************************************/
/*                                                                              */
/*                              CNC Indexer                                     */
/*                                                                              */
/*                         Wagner Mello May 2013                                */
/*                                                                              */
/********************************************************************************/

//  v4: July 29 2013 : Bug backlash solved
//  V3: July 13 2013 : Bug newdeg%360 solved
//  V2: July 12 2013 : Bug dJog=0 solved


#include "arduino.h"

#include <Wlcd.h>
#include <Wstepper.h>
#include <EEPROM.h>

Wlcd lcd=Wlcd(2);
WStepper stp=WStepper();

#define KRT  1
#define KUP  2
#define KDW  3
#define KLF  4
#define KSL  5

#define CW   0
#define CCW  1


/********************************************************************************/

int Stt;

int Cur;
int Key;

int Div;

long pStp;                                    // Actual position (Steps)
long pDeg;                                    // Actual position (Degrees x 1000)
long cDeg;                                    // Calculated position (Degrees x 1000)

long sRot;                                    // Steps per revolution
long sBkl;                                    // Backlash (Steps)
float sVel;                                   // Velocity (Steps/Second)
float sAcc;                                   // Acceleration (Steps/Second²)

struct Cnf
{
 int Mod;                                     // Mode
 int Stp;                                     // Full steps per revolution
 int Mst;                                     // Microstepping mode
 int Red;                                     // Reduction gears
 int Mvl;                                     // Maximum velocity (Degrees/Minute)
 int Acc;                                     // Acceleration (Degrees/Second²)
 int Bkl;                                     // Backlash (Degres x 1000)
 int nDiv;                                    // Division mode, number of divisions
 long dDeg;                                   // Degree mode, step (Degrees x 1000)
 long dJog;                                   // Jog mode step (Degrees x 1000)
}Cnf;

```

Internet "CNC indexer arduino wagner"