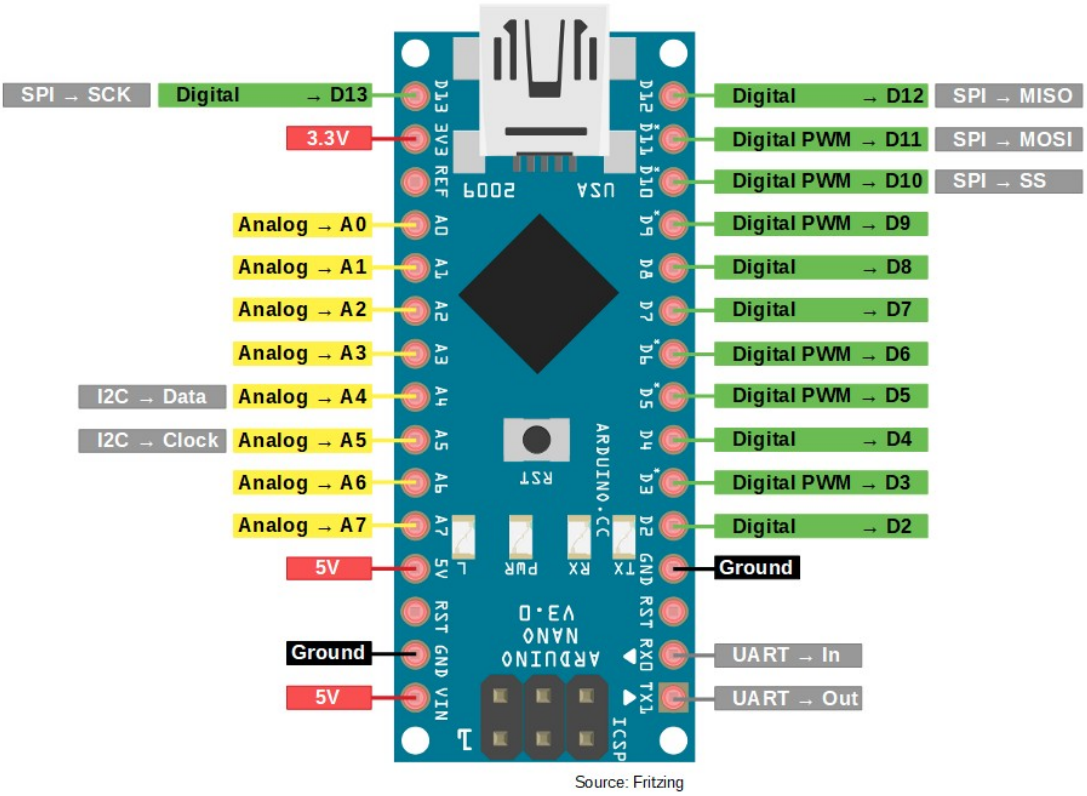
Pins



Display Connections

Display	Arduino
DC (Green)	D8
RESET (White)	D9
CS (Orange)	D10
MOSI (Blue) (DIN)	D11
SCLK (Yellow)	D13
Red 5V PWR	5V
Black GND	GND

Encoder Connections

Encoder	Arduino
Black+ gnd	gnd
Green inx	D4
White chA	D2
Red +5V	+5V
Brown chB	D3

General Notes

Encoder

I used a US Digital E6-3600-125-IE-S-D-D-3 using quadrature encoding this delivers a resolution of $^{1}/_{40}^{th}$ of a degree.

{*E6 Kit Encoder, 3600 CPR, 1/8" Bore, Index, Single-Ended, Default Cover, Default Base, Encoder packaged individually with one spacer tool, one hex wrench, and one centering tool per encoder*}

also

US Digital Encoder Cable CA-C5-SH-FC5

Connector is a Molex 14-60-0052 if you want to make up your own.

Display

Waveshare 1.5inch RGB OLED Display Module 128x128 16-bit High Color SPI Interface

https://www.amazon.co.uk/dp/B07D9NVJPZ/ref=pe_3187911_185740111_TE_item

https://www.waveshare.com/wiki/1.5inch_RGB_OLED_Module

Libraries

You will need the following two libraries for the waveshare display

Adafruit_GFX.h
Adafruit_SSD1351.h

Enclosure

I mounted the arduino/display box directly onto the faceter head using silicone sealant.

The display and electronics were shoehorned into a

Hammond 1591XXBSBK (113 x 63 x 28mm)

however the larger

Hammond 591XXCTBU (121 x 66 x 31mm)] may be easier.

My version of Tom Herbst's code for the Arduino Nano may be downloaded from

www.starfishprime.co.uk/downloads/downloads.html