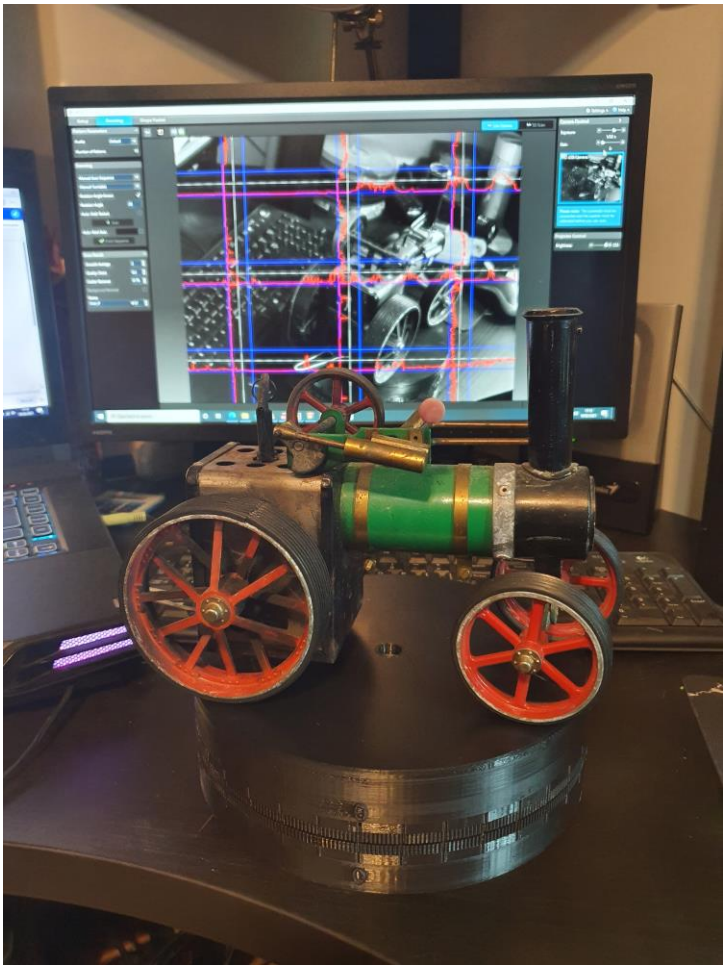
HP 3D SCAN TURNTABLE INSTRUCTIONS



Parts list:

Bearings

8x22x7 3 off sourcing map 608ZZ Deep Groove Ball Bearing Double Shield 8mm x 22mm x 7mm High Carbon Steel Z1 Bearings 4pcs: Amazon.co.uk: Business, Industry & Science

4x12x4 8off sourcing map 604ZZ Deep Groove Ball Bearing Double Shield 604-2Z 80014, 4mm x 12mm x 4mm High Carbon Steel Z1 Bearings (Pack of 8): Amazon.co.uk: Business, Industry & Science

Motor and Driver

Haljia 5v 4phase stepper motor and driver 1off Fliyeong 1 Set of 5V Stepper Motor and ULN2003 Driver Board 28BYJ-48 4-Phase Stepper Motor for Arduino: Amazon.co.uk: DIY & Tools

Arduino Uno

ELEGOO UNO R3 Board ATmega328P ATMEGA16U2 with USB Cable Compatible with Arduino IDE Projects RoHS Compliant: Amazon.co.uk: Computers & Accessories

Bolts and fixings

M8 cap head 55mm (10) M8-1.25 x 55mm (PT) - Socket Head Cap Screws, Stainless Steel Grade A2 (18-8), DIN 912 / ISO 4762, Hex (Allen) Key Drive - MonsterBolts (10, M8 x 55mm): Amazon.co.uk: Business, Industry & Science

M8 lock nut M8 (8mm) Nyloc Hex Nut (Type-P) - Stainless Steel (A2) (Pack of 20): Amazon.co.uk: DIY & Tools

M4 cap head 12mm M4 (4mm x 12mm) Hex Socket Cap Screw (Bolt) (Low Head) - Stainless Steel (A2) (Pack of 20): Amazon.co.uk: DIY & Tools

M4 nuts M4 (4mm) Hex Nut - Steel (Pack of 100): Amazon.co.uk: DIY & Tools

Small screws MEIYYJ PA Phillips Micro Laptop Repair Screws M2 M2.3 M2.6 M3 Computer PC Pan Self-Tapping Electronic Mini Wood Screws,Pack of 500: Amazon.co.uk: DIY & Tools

3d Printer Settings

All parts to be printed in Black PLA scanner doesn't pick up black

Turntable base:

Resalution .2

Temp 195

Speed 50mm/s

Bed 60

Bottem layers 3

Top layers 6

Infill 25%

Z support .3

Wall count 3

Support Everywhere

Turntable top:

Resalution .2

Speed 50mm/s

Bed 60

Bottem layers 6

Top layers 3

Infill 25%

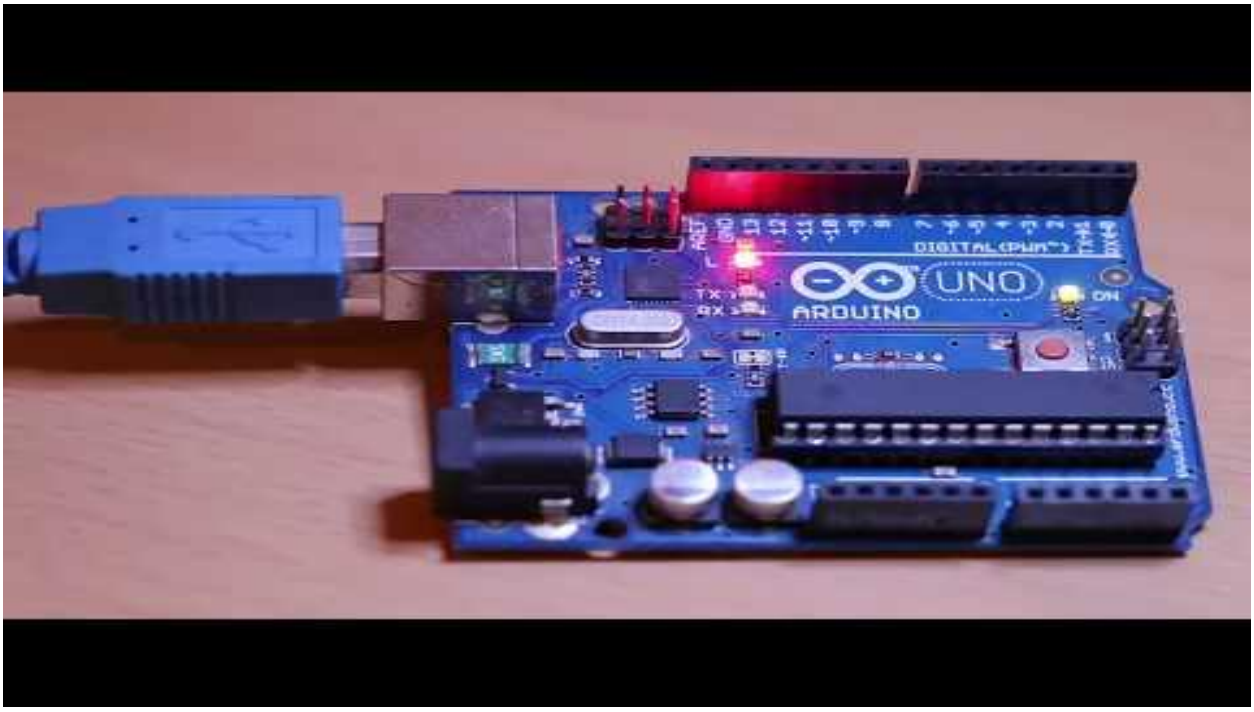
Wall count 3

Support NONE

Ardunio Upload:

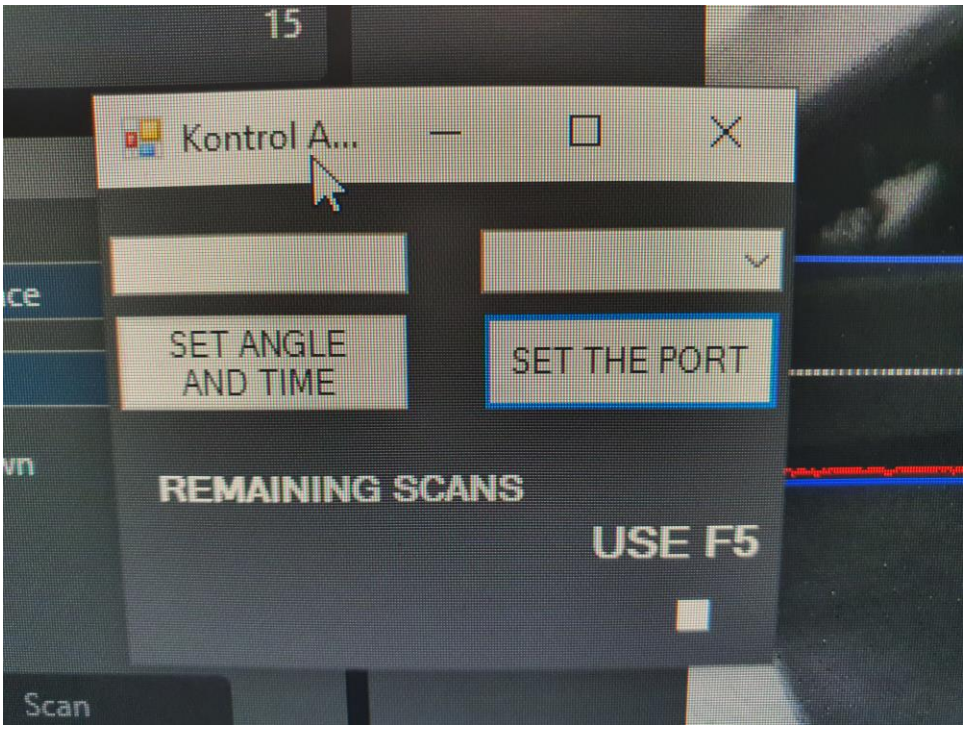
Upload controller.ino to ardunio using Arduino IDE from turntable.zip

Help here if you have never done this before: [(208) Upload your first code to arduino uno - YouTube]



Install Turntable Control Software:

Find hpturntable.exe in zip click and you should have this on your screen (may look different still under development)



How To Use:

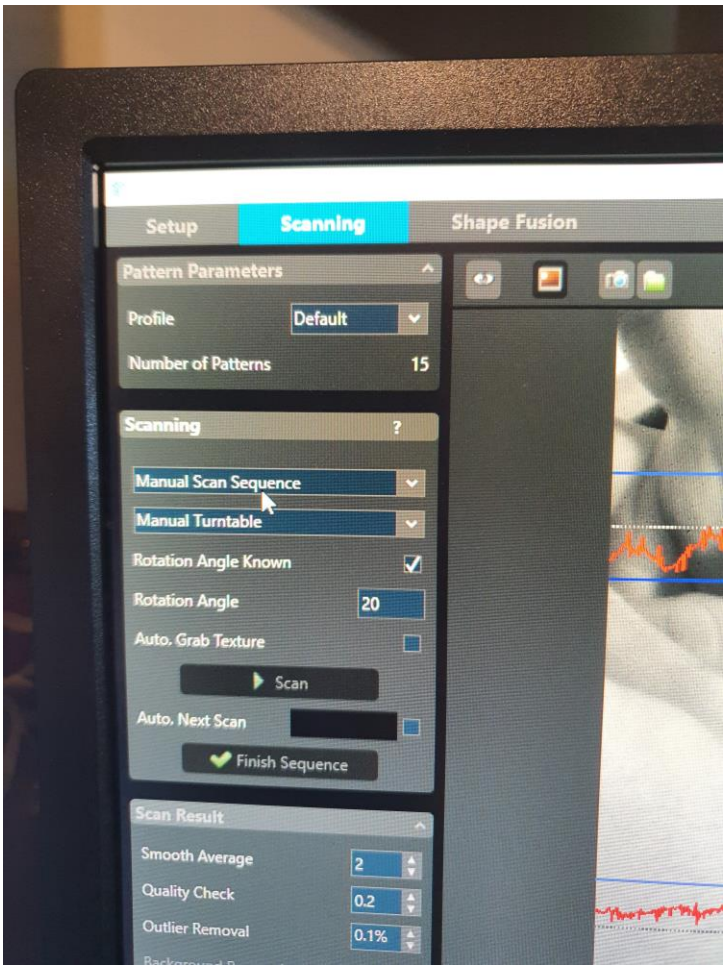
Setup HP5 (or older david versions) ready to scan calabration ect.

On scanning page set for Manual Scan Sequance

Manual Turntable

Tick Rotation Angle Known

Rotation Angle (insert your desired angle)



Scan and time scan then add 3 seconds (you will need this to input into control software)

Plug in Turntable

Open hpturntable.exe

Set port to correct com port (cheak device manager if unsure)

Click use f5 (soon to be Auto next scan)

Set Time and Angle (this can be confusing) you can set miliseconds but my example will be 30 seconds 15 degree eg. 30000015 30 is seconds followed by 000 for miliseconds then 015 is degrees. second eg 45000030 is 45 seconds 30 degrees.

Click Set angle and time button scan will start

HAPPY SCANNING