

Ambrosio V 1.0

Color sorter machine
controlled by
web interface with
Node.js

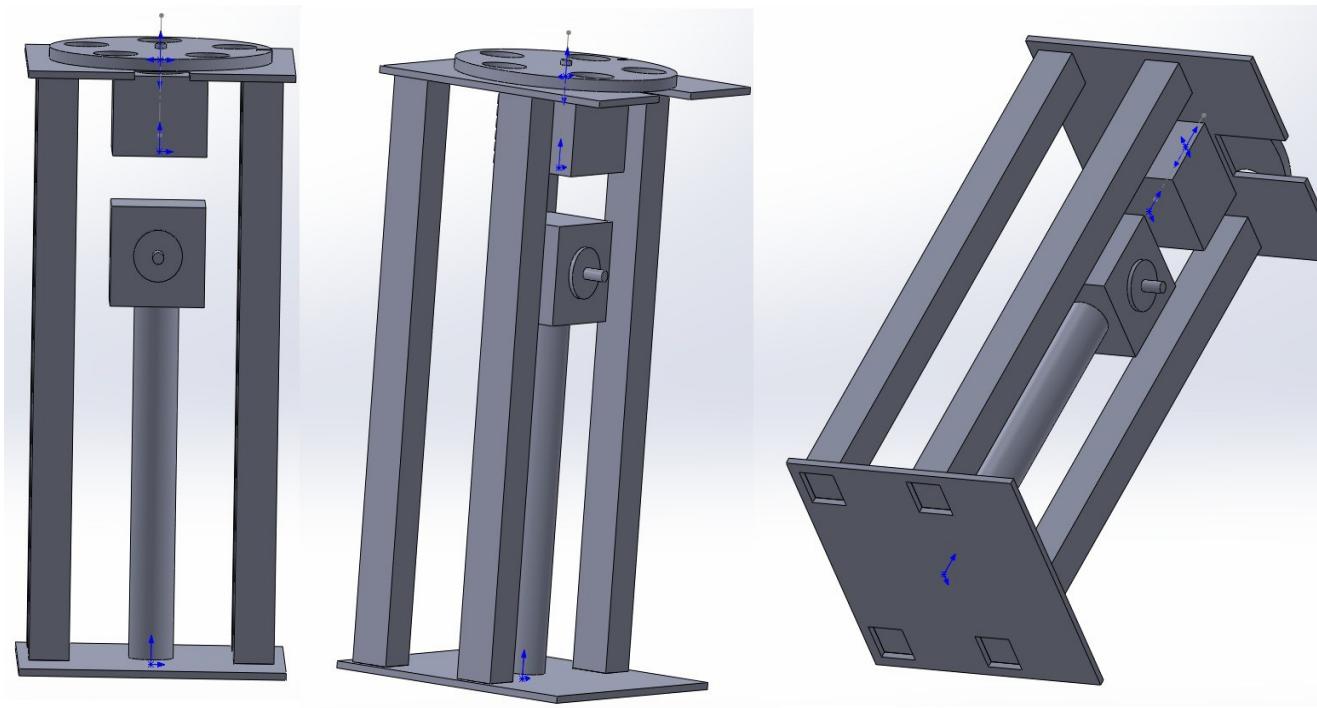
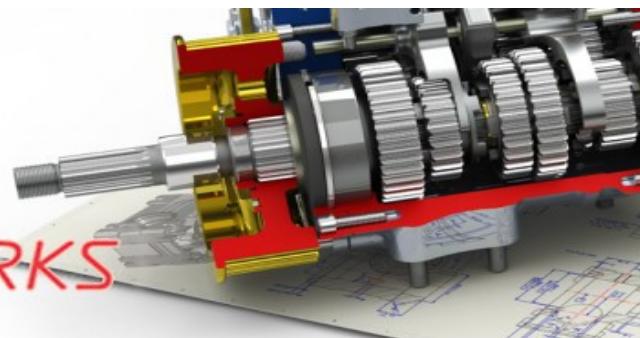
Patrocinador

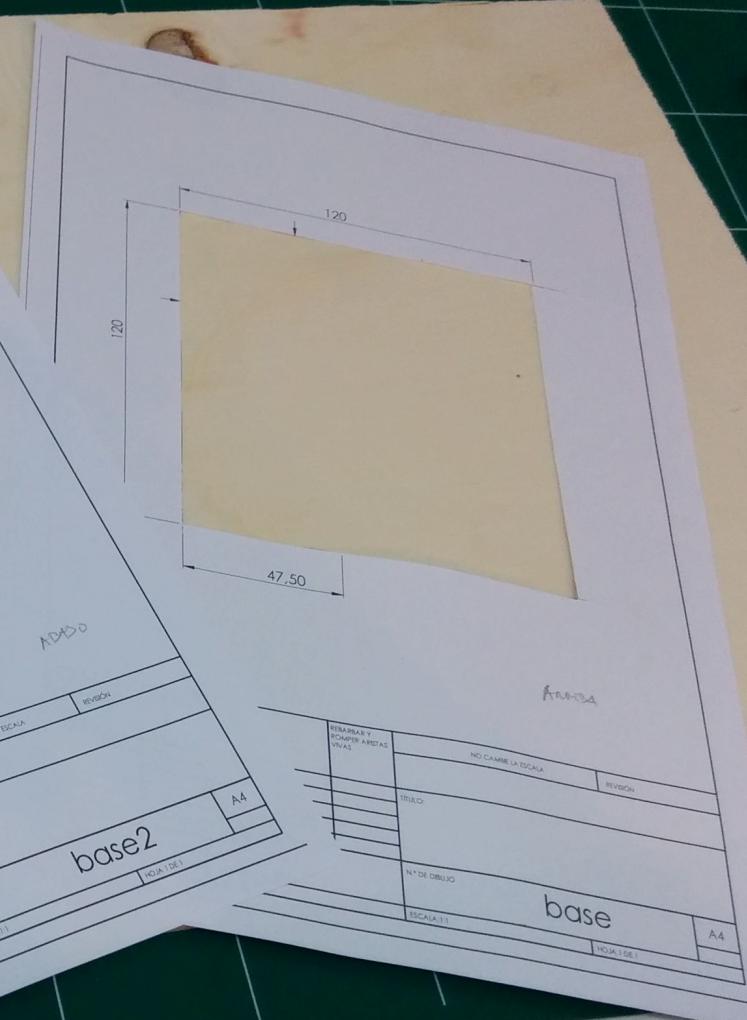
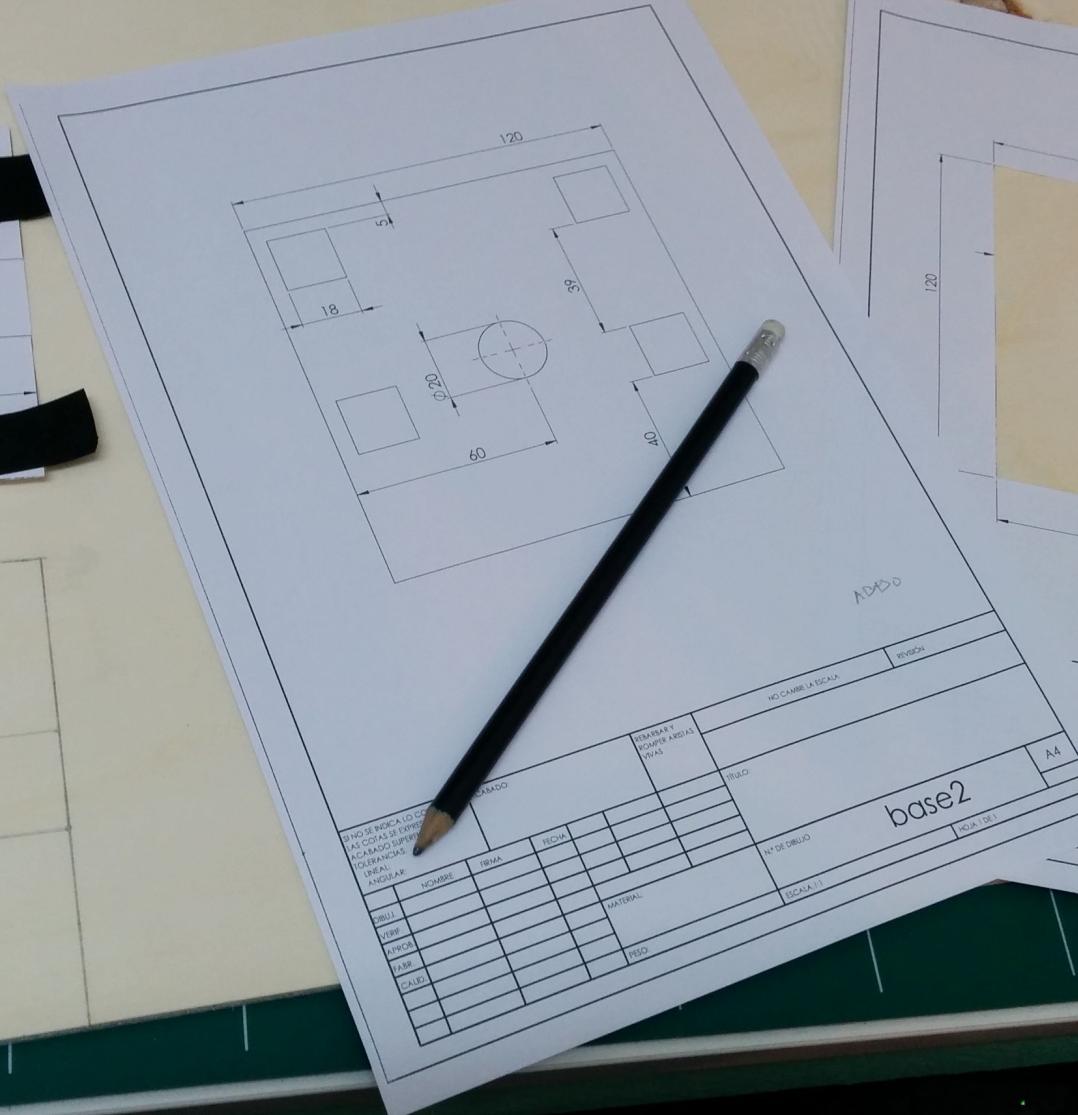
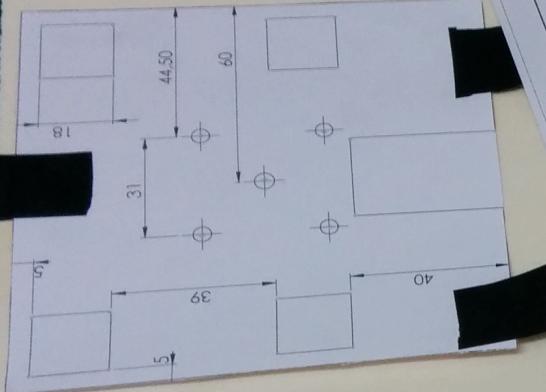


Construcción estructura



SOLIDWORKS





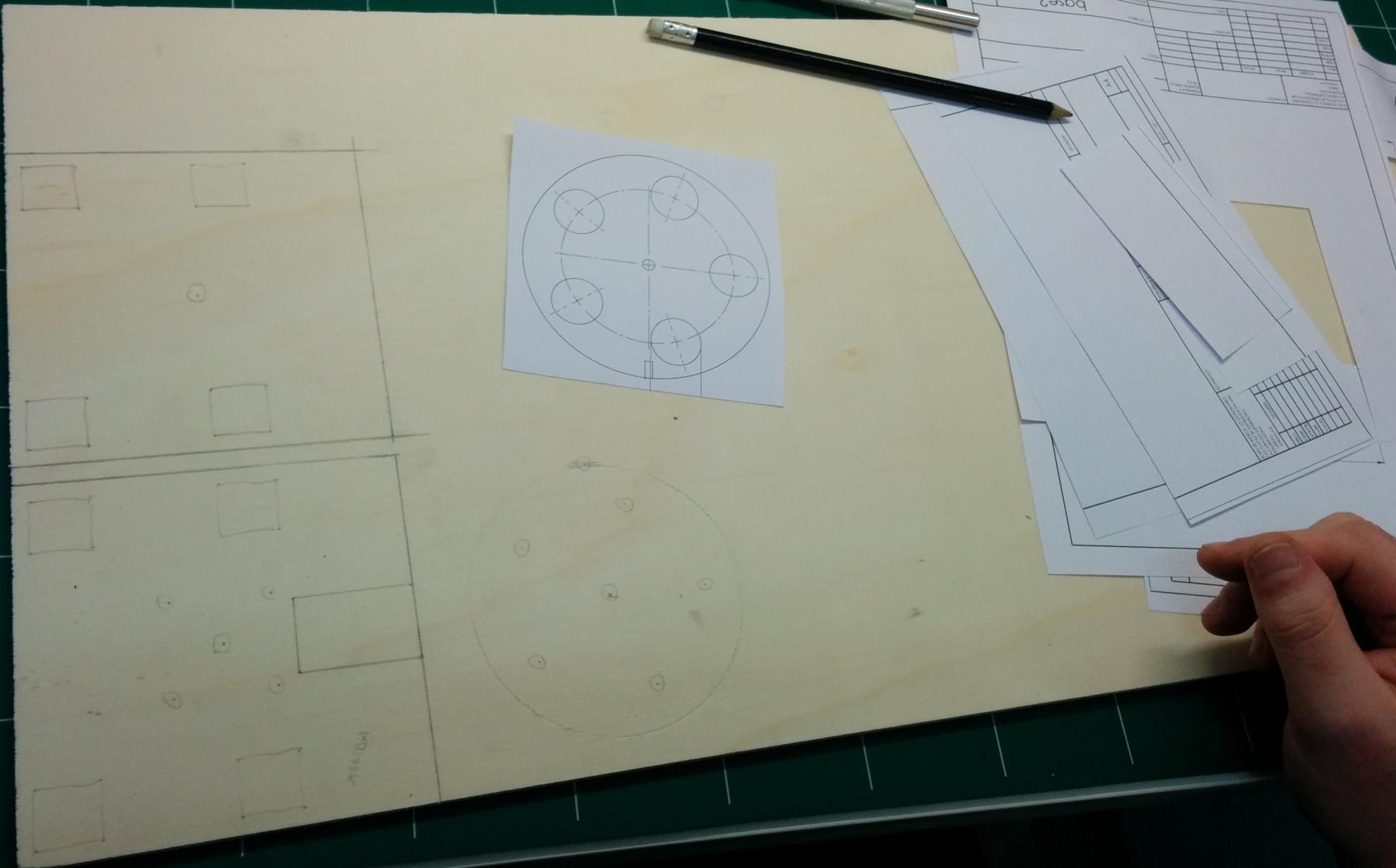
NO SE INDICA COORDENADAS NI COTAS EXPRESAS EN ESTA FICHA		NO CAMBIE LA ESCALA	
ACABA SUPERIOR		REVISIÓN	
TOOLING ANGULAR			
UNITAL			
DETALLADO:			
REMARQUE Y COMENTARIOS AVANZADOS			
REMARQUE Y COMENTARIOS AVANZADOS			
REVISIÓN			
NOMBRE		FECHA	
FIRMA			
MATERIAL			
PESO			
Nº DE DIBUJO		HOJA 1 DE 1	
BCAU.11			

base2

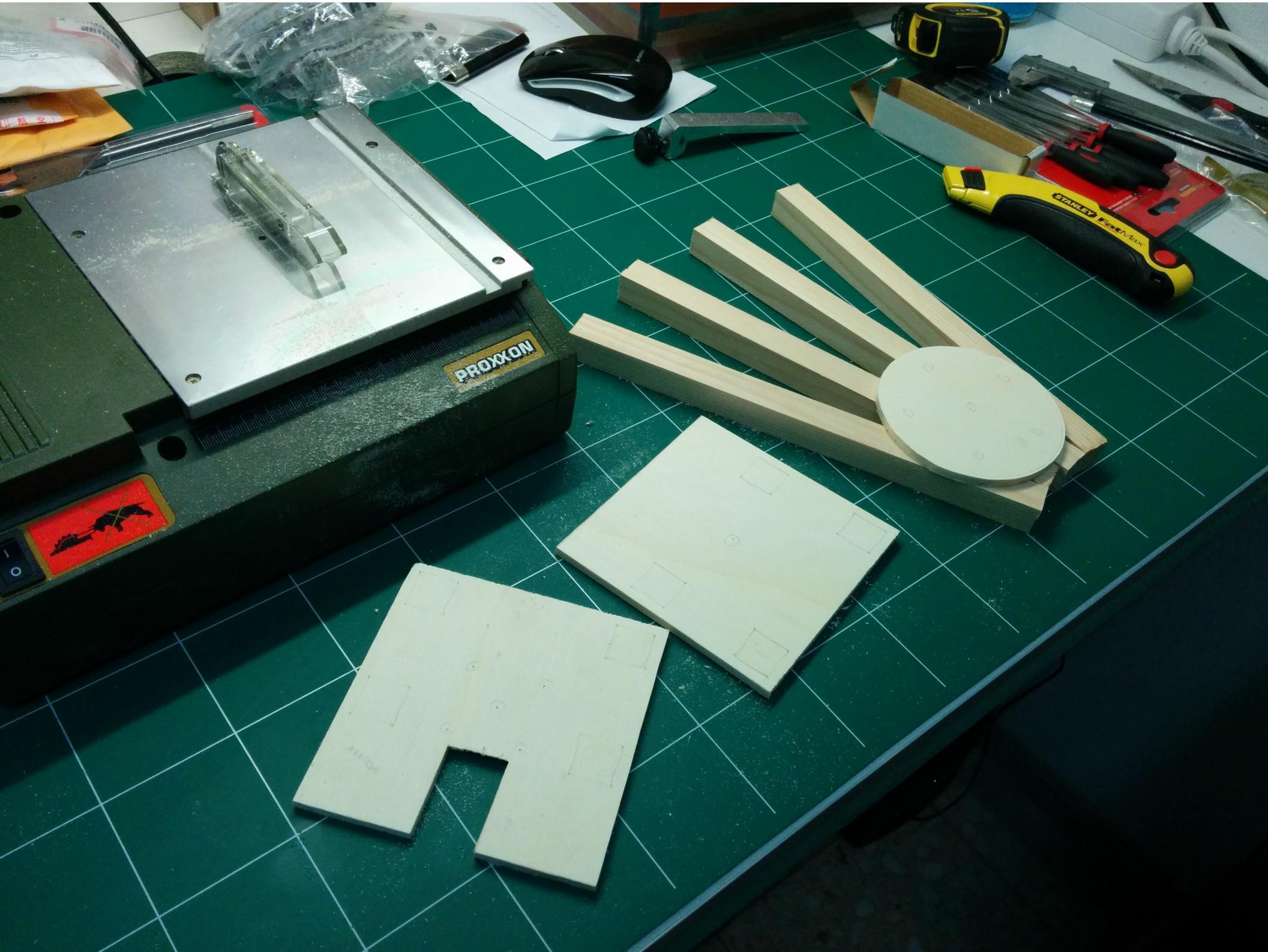
ANEXO

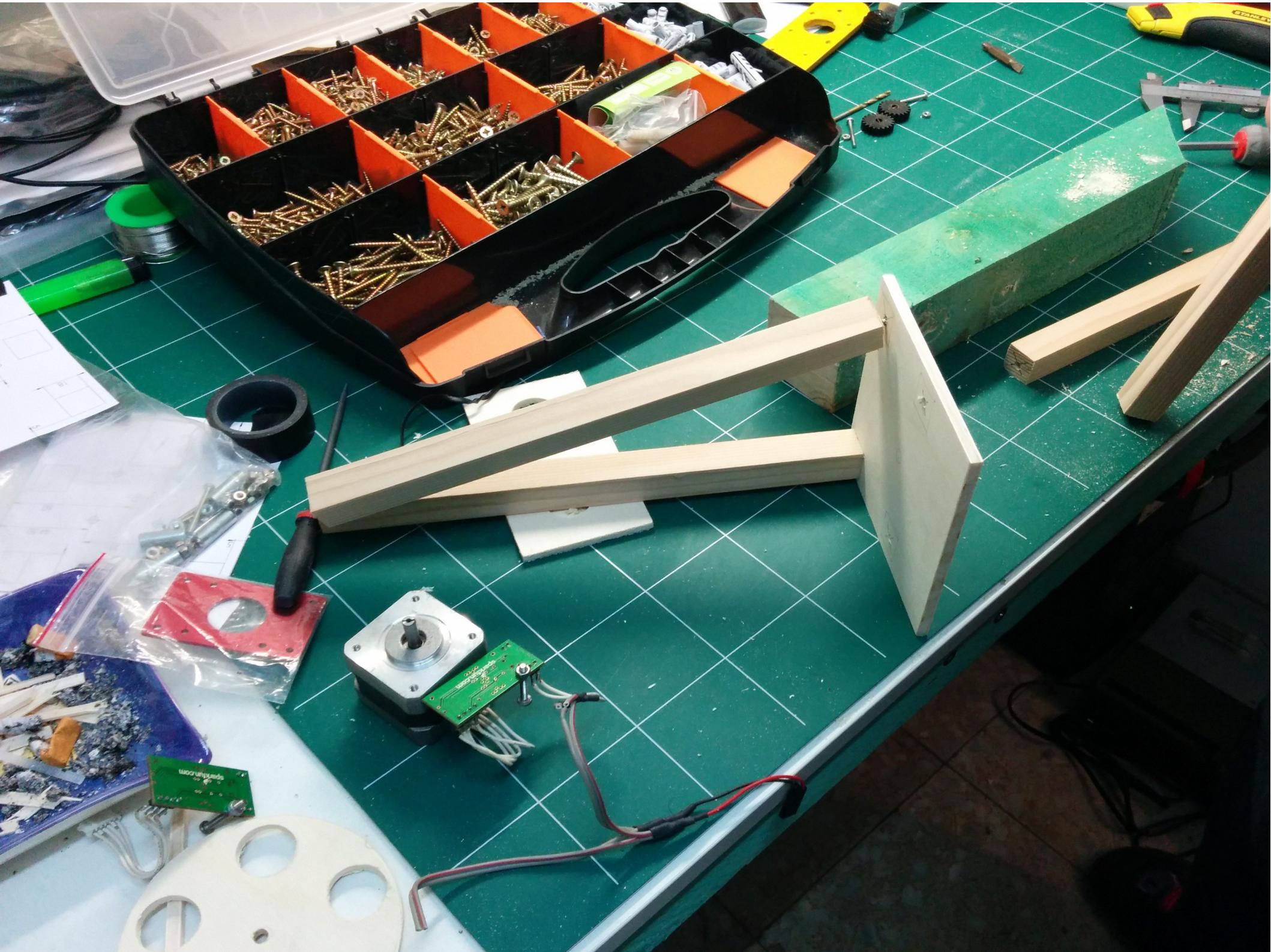
base

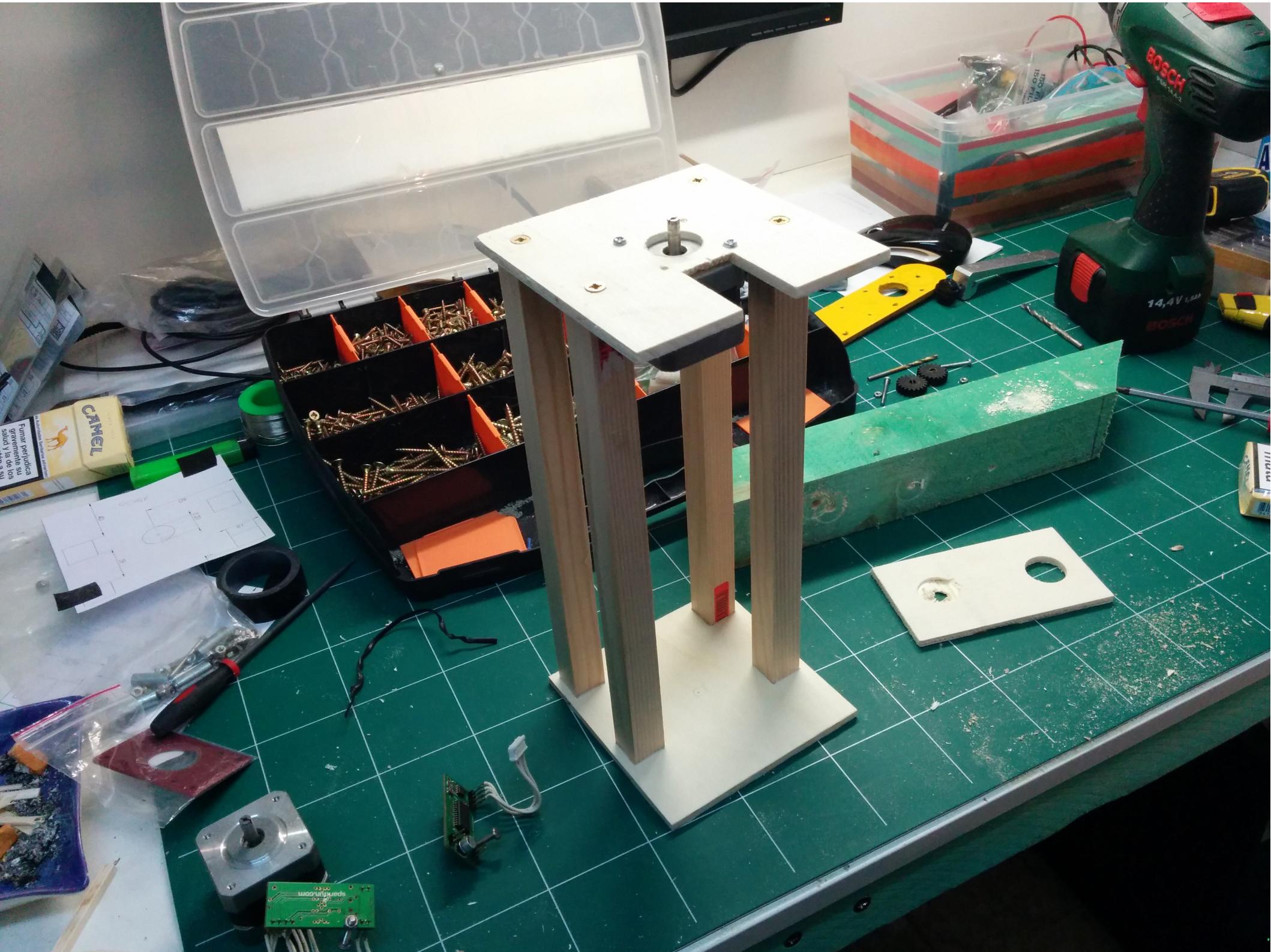
NO SE INDICA COORDENADAS NI COTAS EXPRESAS EN ESTA FICHA		NO CAMBIE LA ESCALA	
ACABA SUPERIOR		REVISIÓN	
TOOLING ANGULAR			
UNITAL			
DETALLADO:			
REMARQUE Y COMENTARIOS AVANZADOS			
REMARQUE Y COMENTARIOS AVANZADOS			
REVISIÓN			
NOMBRE		FECHA	
FIRMA			
MATERIAL			
PESO			
Nº DE DIBUJO		HOJA 1 DE 1	
BCAU.11			

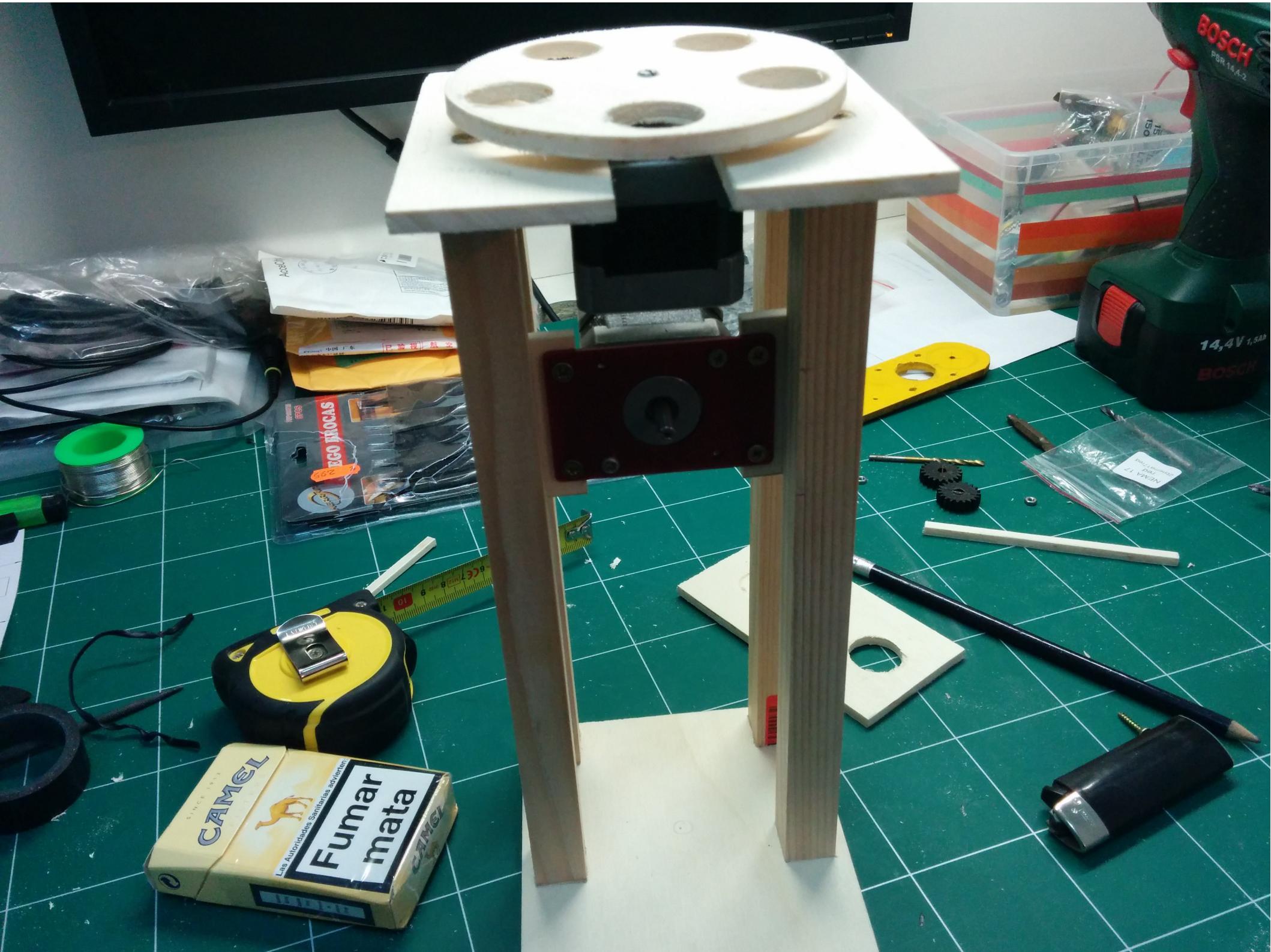


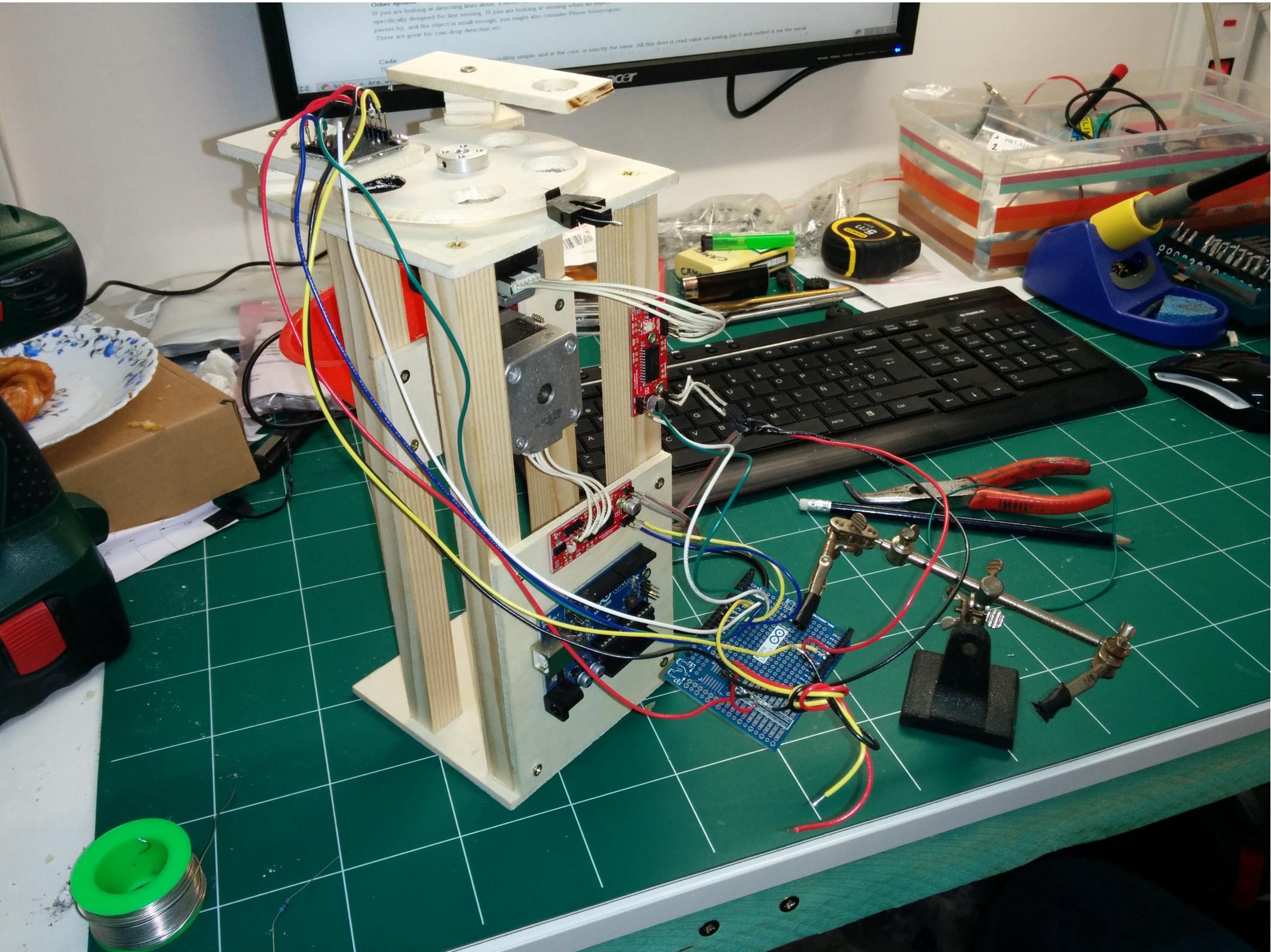






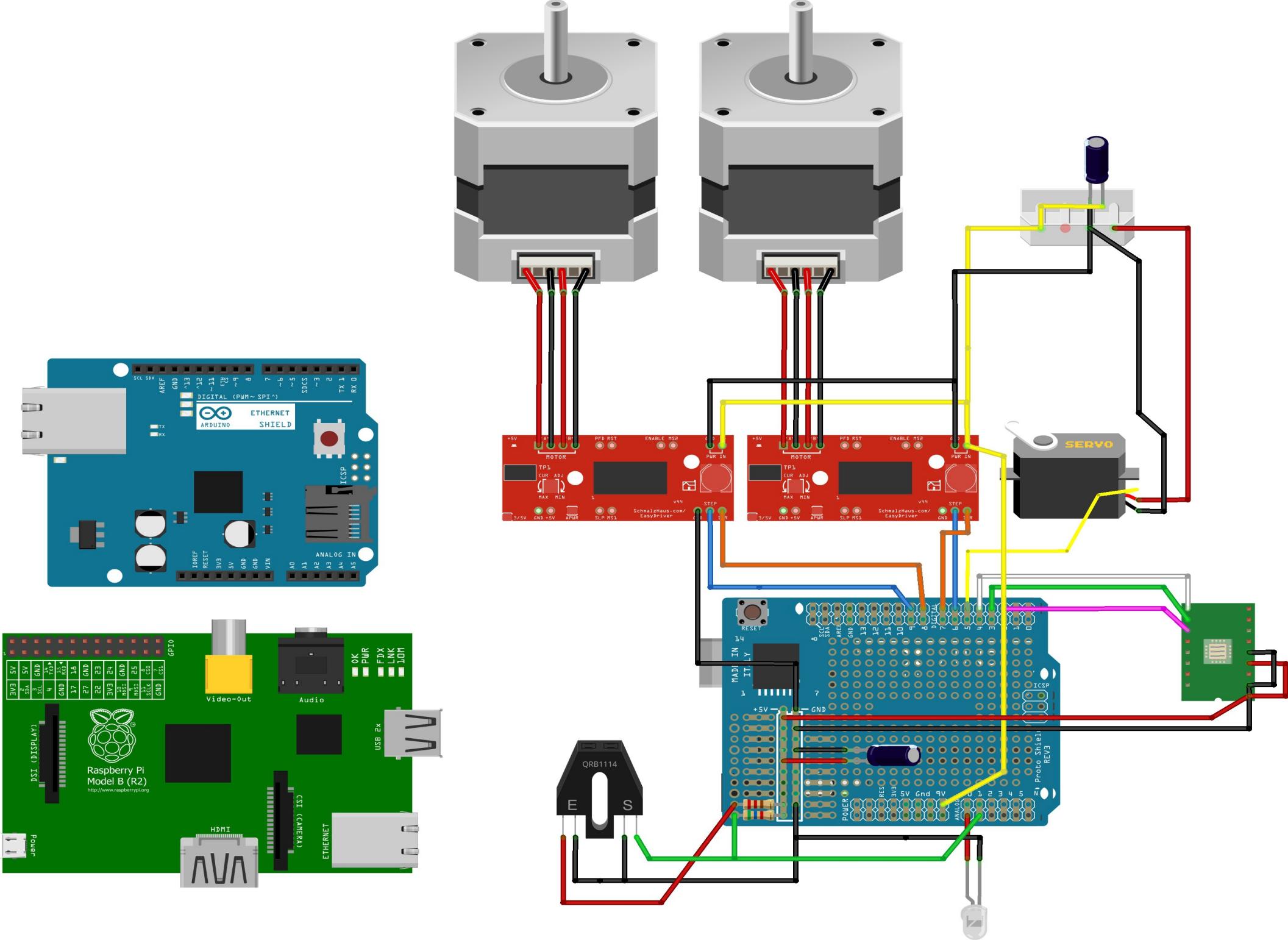






Electrónica

- Arduino uno
- 2 x Easydriver
- Arduino proto pcb
- Arduino ethernet shield
- 2 x Stepper 2.4/kg
- Servo
- Raspberry pi
- Sensor qrb1114
- Sensor color TCS3200
- Punto de acceso WiFi + switch ethernet
- Fuente de alimentación 12V



TCS3200

TCS3200, TCS3210 PROGRAMMABLE COLOR LIGHT-TO-FREQUENCY CONVERTER

TAOS099 - JULY 2009

Terminal Functions

TERMINAL NAME	NO.	I/O	DESCRIPTION
GND	4		Power supply ground. All voltages are referenced to GND.
OE	3	I	Enable for f_o (active low).
OUT	6	O	Output frequency (f_o).
S0, S1	1, 2	I	Output frequency scaling selection inputs.
S2, S3	7, 8	I	Photodiode type selection inputs.
V _{DD}	5		Supply voltage

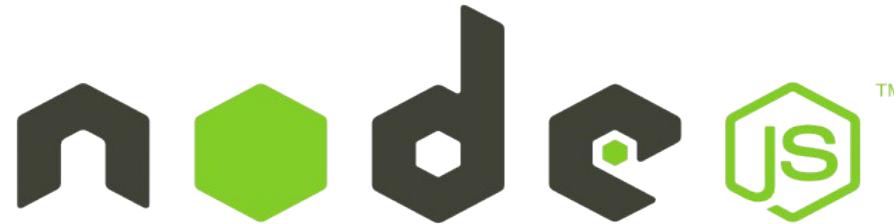
Table 1. Selectable Options

S0	S1	OUTPUT FREQUENCY SCALING (f_o)
L	L	Power down
L	H	2%
H	L	20%
H	H	100%

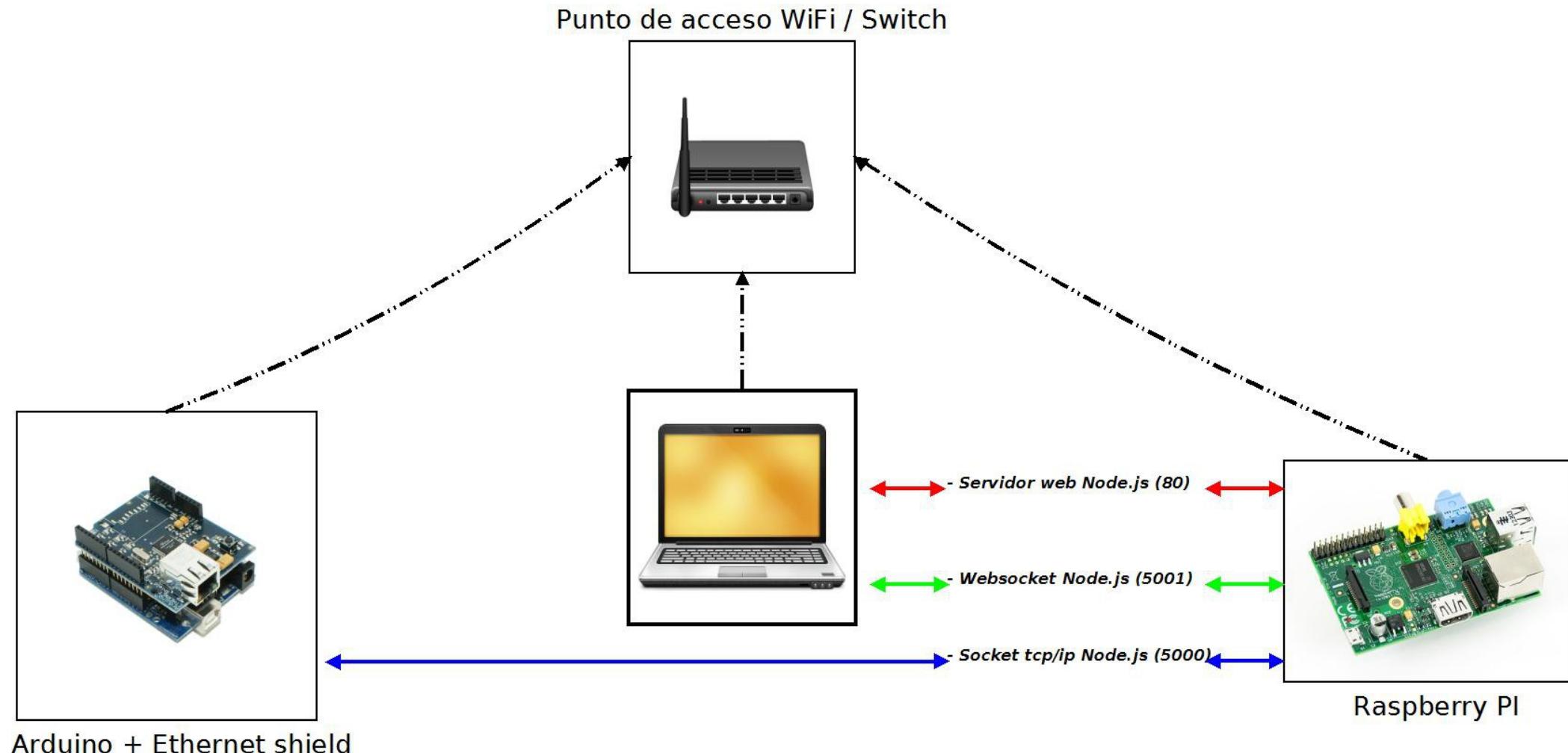
S2	S3	PHOTODIODE TYPE
L	L	Red
L	H	Blue
H	L	Clear (no filter)
H	H	Green



Interface Ambrosio



Connectivity



Otros datos

- Tiempo total: 20 horas.
- Lineas de código:
 - Sketch arduino : 508
 - Web interface : 458
 - Node.js: 188

