

Version 4.0.0.3

Caution:- Both 3.3 Volt and 5 Volt devices are used.

3.3V wires are shown in Brown
5V wires are shown in Red.

When using JST connectors, there is no Brown wire, so use Red but be very careul to ensure correct connections.

Optional
Flash plug.
Centre pin -Green
Outer - Black

Encoder - (JST)
Red - 3.3V
Orange - Btn
White - S2
Yellow - S1
Black - GND

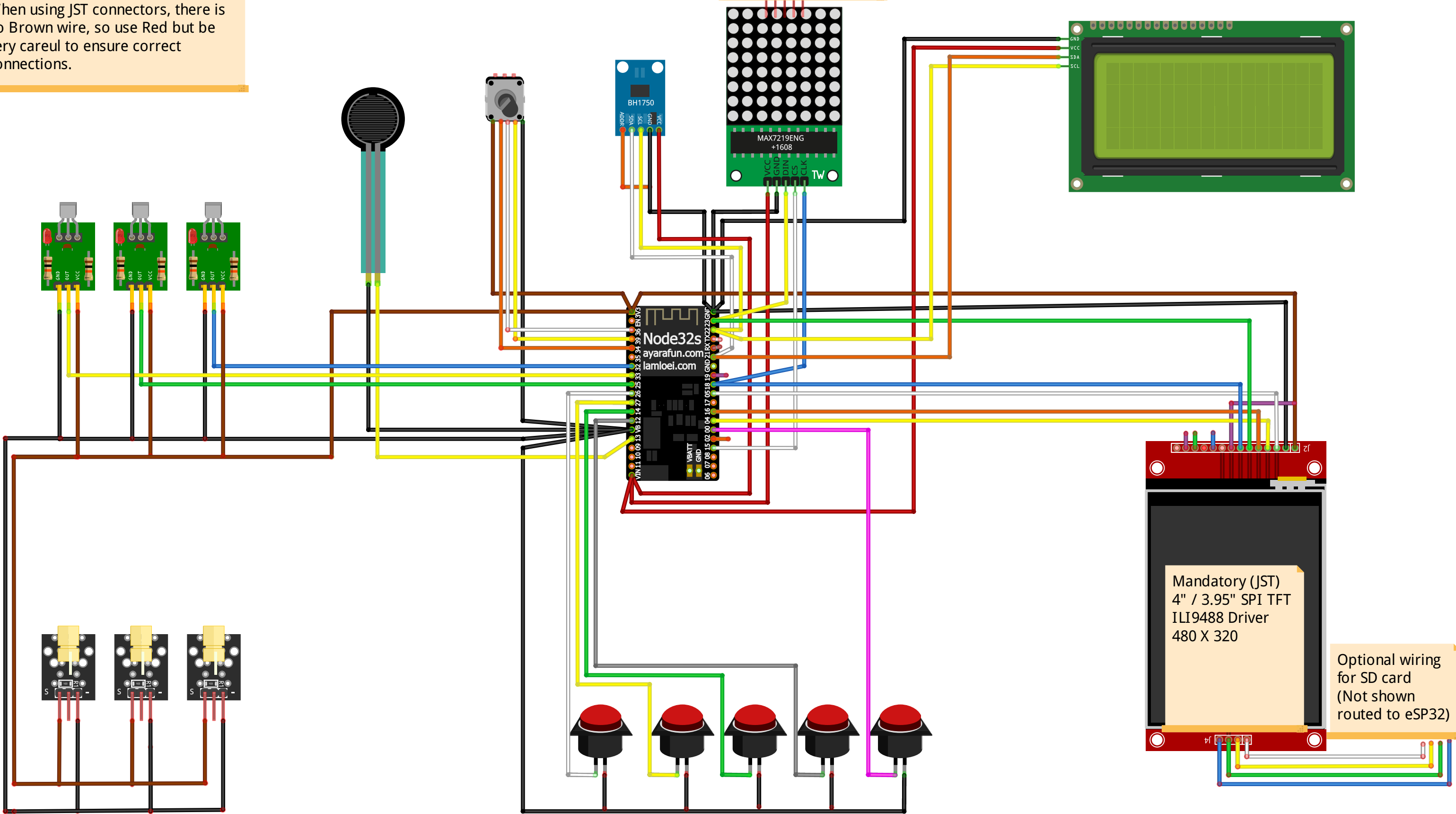
Optional
Light Sensor (JST)
GY-302
module
(5V)

Optional
LED Matrix (JST)
(shown upside down)
(5V)

Optional LCD - Depreciated.
Connections to iic on rear of LCD
Black GND
Red VCC (5V)
Orange SDA - 21
Yellow SCL - 22

Transparent three legged sensors must be fitted with the flat surface at the rear and the little dome pointing over the board and towards the laser. Connecting them incorrectly WILL destroy them.

Caution
To avoid sensor damage, wire up the rx modules BEFORE plugging the transparent senors into them. Double check wiring BEFORE powering up the board & ensure LEDs light. Then de-power the board and insert sensors ENSURING the sensor is fitted the correct way round.



1	2	3	4	5
White	Yellow	Green	Black	Red
Display Ave	Ave-Reset	LightMeter	Menu	LED Matrix

Note:- DO NOT use the GND pin on the EPS32 board, that is located between pins 19 & 21.

Notes on wiring Colours
3.3V are shown in Brown, and 5V are shown in Red, for clarity.

The wiring and photos of this Shutter Tester were build used pre-made JST HX connectors, (which require some Pins removing and swapped in the housing)

As the pre-made JST HX connectors do not contain a Red wire, use Red for both 3.3 & 5V wires, but use extreme caution.

The alternate to pre-made JST HX connecrors is to use the cheap Aliexpress kit.

However, these kits do not contain Orange or Brown wires.

It is suggested that Blue is used an an altenate to Orange, or buy single Orange & Brown wires. Links to these are in the parts list document.

TFT pins in order	ESP32	Wire Colour	
TFT_VDD	3V3	Red	
TFT_GND	GND	Black	
TFT_CS	5	White	Chip select
TFT_RST	4	Yellow	Reset pin
TFT_DC	16 (2)	Orange	Data
Command			
TFT_MOSI	23	Green	
TFT_SCLK	18	Blue	
TFT_LED	3V3	Purple	
TFT_MISO	----	do no connect	

Wiring below not required			
Touch_CCLK	18	Blue	
Touch_CS	2 (15)	Orange	
Touch_DIN	23	Green	MOSI
Touch_TFT_DO	19	Violet	MISO
Touch_IRQ		do not connect	

Optional Sd Card conections for datalogger		
TFT	ESP32	Wire Colour
CLK (SLK)	18	Blue
SDI (MOSI)	23	Green
SDO (MISO)	19	Yellow
SCS (CS)	17	White