

Version 4.0.0.2

Caution:- Both 3.3Volt 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.

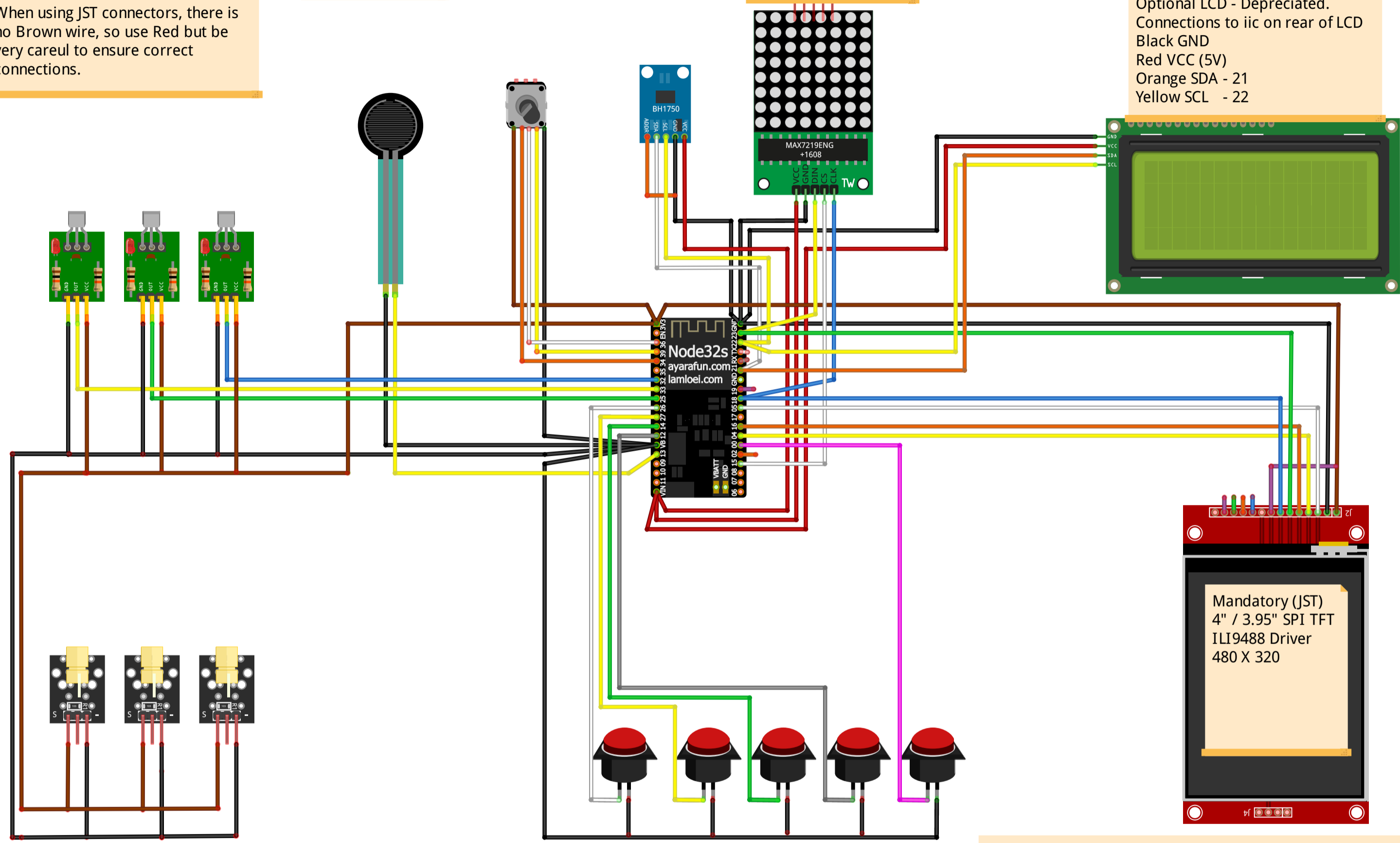
Optional Flash plug.
Centre pin -Green
Outer - Black

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



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

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

The wiring and photos of this Shutter Tester build used pre-made JST HX connectors, which contain an Orange wire.(which require the ins removed and swaped in the housing)

The cheap Aliexpress JST HX kits do not contain an Orange wire.
It is suggested that Blue is used as an alternate colour.

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 sensors 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

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	

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

Mandatory (JST)
4" / 3.95" SPI TFT
ILI9488 Driver
480 X 320