

Version 4.0.0.9

wiring for SD card added
wiring foTFT touch added

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.

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

The photos of this Shutter Tester were built
using Red wires for both 3V and 5V JST HX
connectors

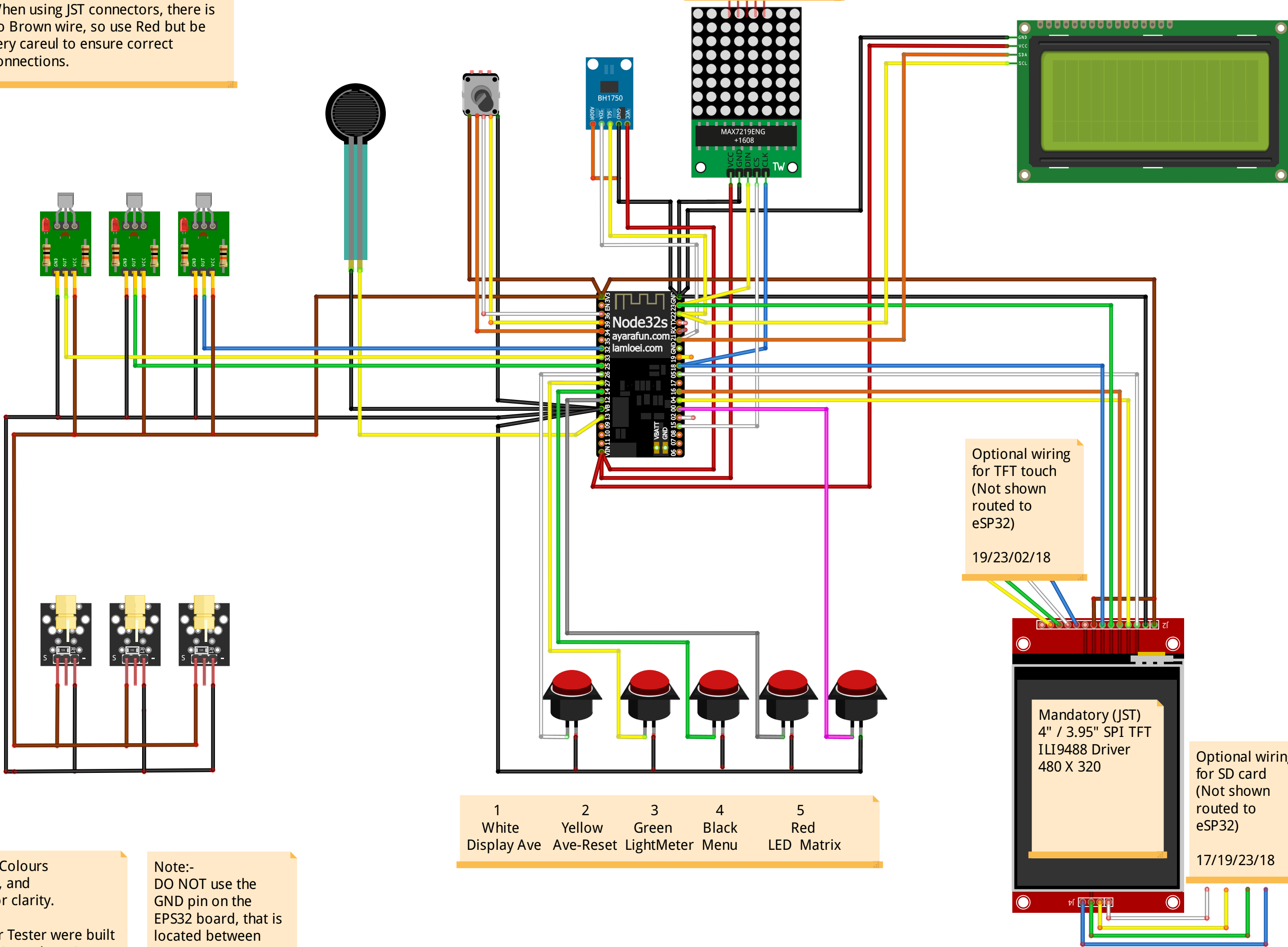
The pre-made JST HX connectors do not
contain Red or Orange wires,

The best option is to purchase additional
Brown and Orange wires as specified in the
parts document.

The alternate is to use Red for both 3.3 &
5V wires, but use EXTREME caution.

Blue can be used as an alenate to Orange,

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



Optional wiring
for TFT touch
(Not shown
routed to
eSP32)

19/23/02/18

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

Optional wiring
for SD card
(Not shown
routed to
eSP32)

17/19/23/18

| 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 | Brown | |
| TFT_MISO | ----- | do no connect | |
| Wiring below not required | | | |
| Touch_CCLK | 18 | Blue | |
| Touch_CS | 2 (15) | White | |
| Touch_DIN | 23 | Green | MOSI |
| Touch_TFT_DO | 19 | Yellow | 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 | |