## For all 5/3.3v 24awg ferule ended wires

Use a yellow ferrule, 8mm of fine #1 tube, 8mm of #2 heat tube.

Strip 8mm off the end of the wire

Install both heat tubes on the wire

Crimp the ferrule in place and slide the #1 tube into the ferrule

Slide the #2 over the ferrule and heat both together.

## For all 240v 20awg ferule ended wires

Use a white ferrule, 8mm of #2 heat tube, 8mm of #3 heat tube.

Strip 8mm off the end

Install #2 heat tubes on the wire and heat so it is just above the wire

Crimp the ferrule in place and slide the #3 tube over the ferrule and heat in place

## Prep the power Inlet socket (380mm wire)

Cut 80mm of brown 20awg wire and strip both ends.

Tin both ends of the wire and all of the blades on the supply (make sure the holes are still useable

Insert the brown wire from live to the switch and solder on

Hot-glue any loop down

Hot-glue the casing so it is no longer loose. Be sure to not overload outside the bezel footprint

Cut a 100mm length of Blue, Brown and green 20awg wire.

Ferule on one end, solder in place on the power supply

Insert a 5 amp fuse

## Prep the outlet sockets (930mm 20awg)

Cut and ferule 20awg wire:

* 140mm blue x2
* 185mm greenx2
* 140mm brown x2

## Prep the 5v PSU hot side (450mm 20awg)

Cut and ferule 20awg wire:

* XXmm blue
* XXmm brown
* XXmm green

## Prep the 5v PSU cold side (300mm 24awg)

Cut and ferule 24awg wire:

* XXmm Black
* XXmm Red

## Prep OLED screen (600mm 24awg)

Cut 150mm of red, black blue and green 24awg wire

Tin one end for about 8mm and ferule the other

Trim the tin end to a couple of mm so the sheath is gripped and a bit of wire sticks out.

Crimp the sheath

Solder the wire – carful not to get solder into the pin

Install the wires onto the screen (green for data – pin 1)

## Temperature sensor socket (300mm 24awg)

Cut 100mm of red, black and red 24awg wire

Tin one end and ferule the other

Holding the jack socket with the cluster of 3 pins at the top. Top pin red, left pin black, bottom pin yellow.

Tin pins at the bottom on the outside,

Add 10mm of #2 heat wrap

feed wire from the inside out and flatten against pin

solder in place and cover with the wrap

## Temperature sensor jack (300mm 24awg)

Holding the jack, pin up open, Yellow is left, black is back and red is right.

Tin the jack connectors close to the pin

Strip the wires as close to the outer sheath as possible

Feed the connector outer cover and plastic sheath over the cable

Bend out the arms on the jack and feed through

Close the cable grip

Bend the pins back before soldering

Assemble the sheath

## Bootdown button (300mm 24awg)

Cut 2x 150mm or white 24awg

Tin one end, ferule the other

Tin switch leads

Solder

## Mounting

Raspbery pi: M2.6x6 pan head

Circuit board: M2.6x6 pan head

OLED: M2x6 (M1.8 if possible) pan head

SSR: M3x10 pan head

5v Power supply:M3x10 pan head

240 C14 socket: M3x12 countersunk