Wii-Ext cable assembly

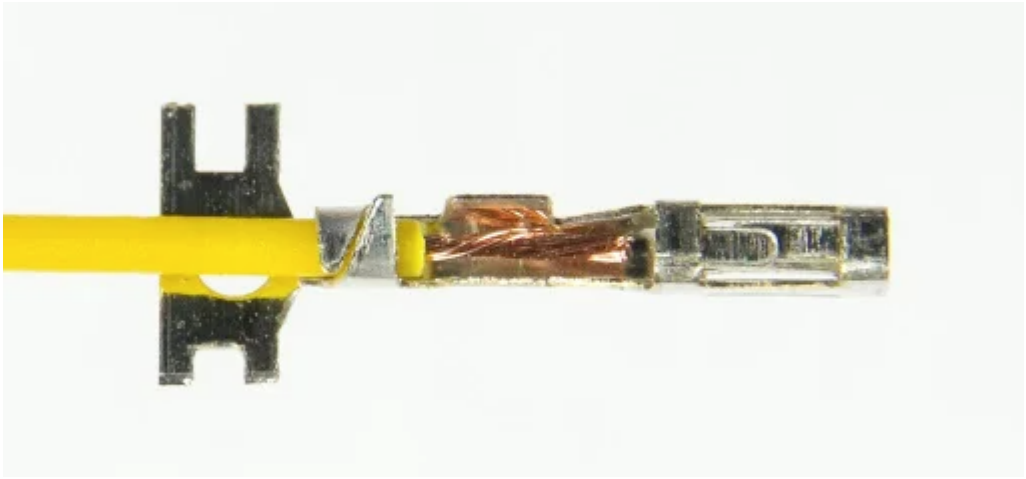
1. If recycling a cable from a broken controller, or if using an extension cable, cut the cable 10-40cm from the plug.
2. Strip 3-5 cm of the outer insulation sleeving from the cable
3. Cut down the red (3V3) and blue (Shield) wires and terminate it with insulated tape
4. Isolate the inner wires from the cable and strip 5mm from each wire
5. Crimp each wire with a female Dupont crimp in line with the crimping guide

USB Power cable assembly

1. If recycling a cable from a broken cable, or if using an extension cable [A USB power-only/no-data cable is recommended], cut the cable 10-40cm from the plug end that you would like to connect to your USB power source (Eg USB-A Male, USB-C Female, USB Micro Female, ect)
2. Strip 3-5 cm of the outer insulation sleeving from the cable
3. Isolate the inner PWR (Red) and GND (Black) wires from the cable and strip 5mm from each wire
4. Crimp each wire with a female Dupont crimp in line with the crimping guide

Crimping

1. Place the wire in a female Dupont crimp
2. Fold the pull relief around the wire



3. Use a crimping tool to shrink the connector around the wire ends
4. Slide the connector housing onto the crimp until it mounts, making sure the orientation is correct

Pull-Ups

A 1K ohm pull-up resistor to 3.3V is required on each of the data lines for each port.

The easiest way to implement this is with the GrechTech Passive Component Breakout Board as shown in the diagrams below, which is available with 1K ohm pre soldered resistors: https://www.tindie.com/products/28367/

Using a breadboard, strip board, or heat shrink wrapped resistor are other possible alternatives

Wire colour code

Blue - Shield

Green - Data 2

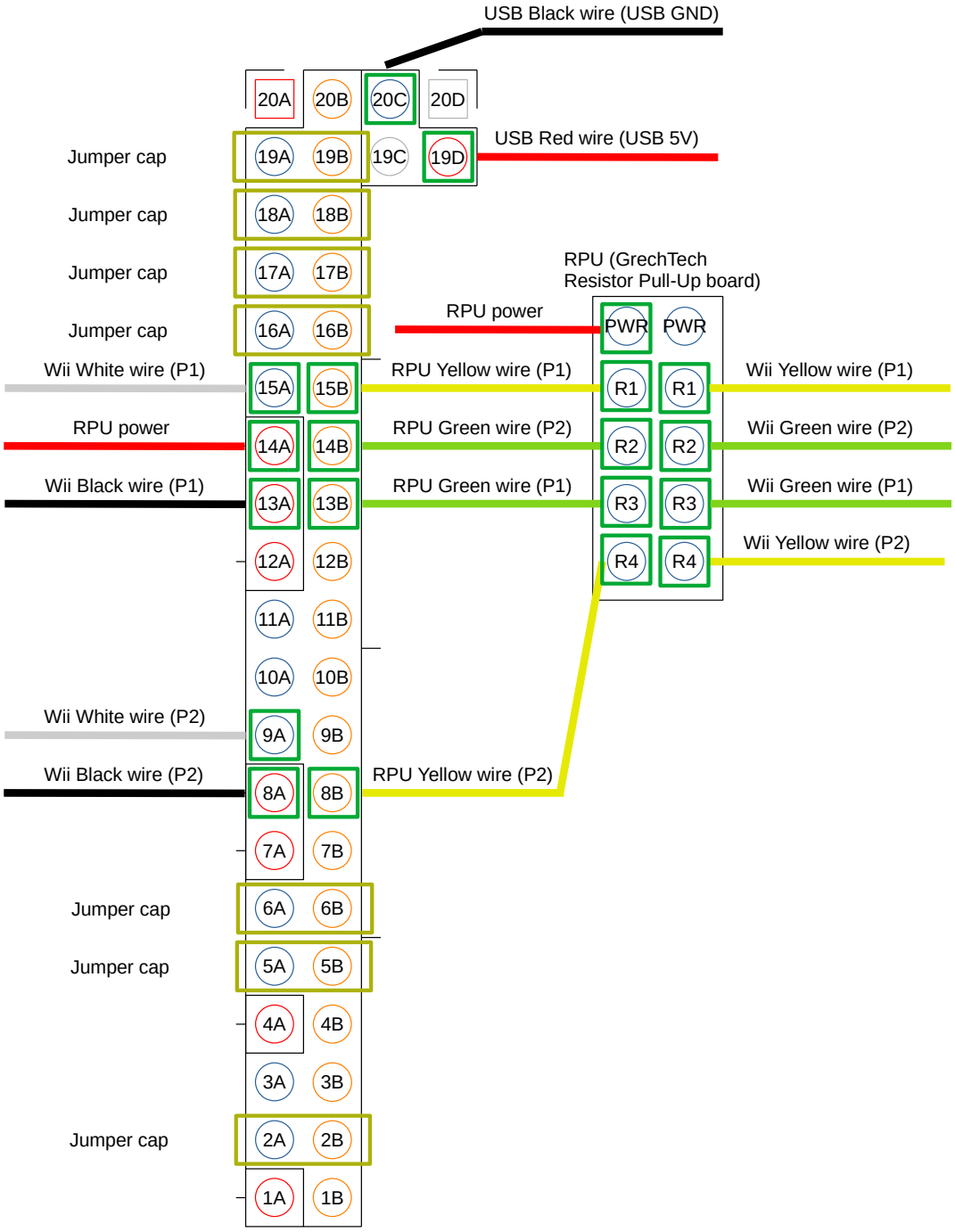
Black - SENSE

Yellow - Data 1

White- GND

Red - 3V3

Wii-Ext 1 Player connection diagram



Wii-Ext 1 Player connection guide

1. Place the jumper caps on rows 2, 5, 6, 16, 17, 18, and 19
2. Connect the red wire of the USB cable to pin 19D
3. Connect the black wire of the USB cable to pin 6A
4. Connect the green wire of Wii-Ext port 1 to the pull up circuit
5. Connect the yellow wire of Wii-Ext port 1 to the pull up circuit
6. Connect the green wire of Wii-Ext port 2 to the pull up circuit
7. Connect the yellow wire of Wii-Ext port 2 to the pull up circuit
8. Connect the green wire of Wii-Ext port 1 to pin 13B
   (Via a jumper wire when using the GrechTech Pull Up board)
9. Connect the yellow wire of Wii-Ext port 1 to pin 15B
   (Via a jumper wire when using the GrechTech Pull Up board)
10. Connect the green wire of Wii-Ext port 2 to pin 14B
    (Via a jumper wire when using the GrechTech Pull Up board)
11. Connect the yellow wire of Wii-Ext port 1 to pin 8B
    (Via a jumper wire when using the GrechTech Pull Up board)
12. Connect the pull up resistors powered side to pin 14A

    (Via a jumper wire when using the GrechTech Pull Up board)
13. Connect the white wire of Wii-Ext port 1 to pin 15A
14. Connect the black wire of Wii-Ext port 1 to pin 13A
15. Connect the white wire of Wii-Ext port 2 to pin 9A
16. Connect the black wire of Wii-Ext port 2 to pin 8A
17. Connections should now resemble the diagram