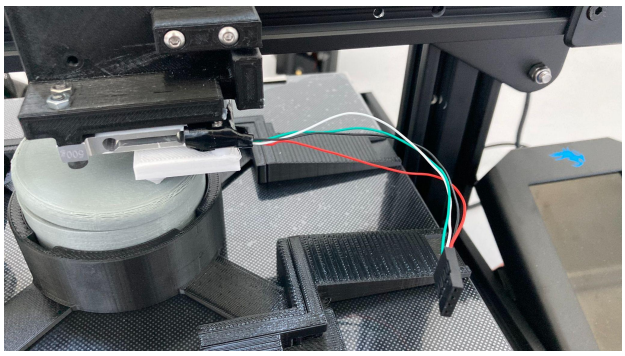
Cable Assembly Guide

Inter-Connection Cable

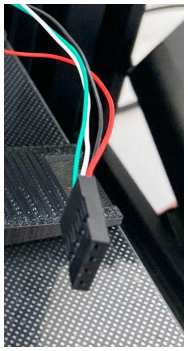
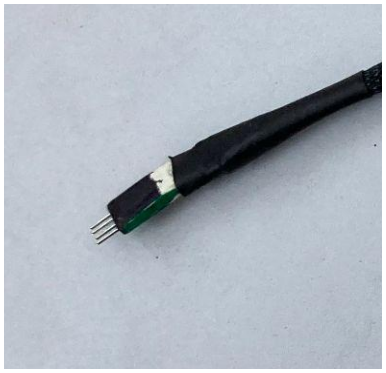


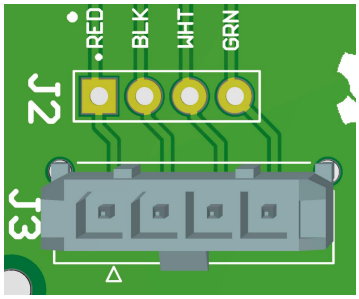
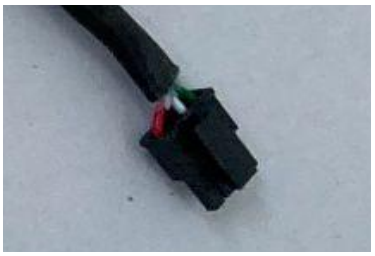
Load Cell Cable

Materials

1 - Load Cell (SEN-14728)
1 - Molex Connector (0436450400)
4 - Molex Crimps (0430300001)
4 - Female Crimps Dupont Connector Type (Standard Jumper wires, use this guide to find them on Digikey)
4 - Male crimps Dupont Connector Type (Standard Jumper wires, use this guide to find them on Digikey)
2 - Dupont Connector Housing (Standard Jumper wire housing, use this guide to find them on Digikey)
1 x 45cm - 22AWG stranded wire
1 x 40cm - ¼” braided sleeving (optional)
2 x 4cm - ¼” heat shrink, recommended to use an adhesive type (optional)

Instructions

1.	Crimp the female Dupont connector and crimps on the load cell wires using a crimping tool such as the following, using this Tutorial. **Note** since the wires for the load cell are very small, you need to add filler wires to the crimps [such as 24AWG stranded wire]. With the filler wire, crimp the connector and cut off the excess filler wire with snips. Be extremely careful with the load cell wires, since the wires are very prone to breaking due to the pinch point on the load cell. It is recommended to add some strain relief on these wires, however heat is likely not recommended cause it may damage the load cell.	   Order: Green, White, Black, Red
2.	Use the 45cm of 22AWG wire and crimp the male Dupont crimps onto one end of the wires in the (make sure to note the order of wires to match the load cell wires, as shown by the picture). Note this time you will not need filler wire, but you can use the same technique as before.	 Order: Green, White, Black, Red

3.	If you choose to use the braided sleeving and heat shrink to protect the wires, you can slip them on at this time. On the jumper wire end, you can use a heat gun or similar means to shrink it, leaving a little bit of room on either end with wires exposed for it to latch on both the wires and the braided sleeving.	  From the picture, you can see the heat shrink encompasses both the wires and the braided sleeving.
4.	Note, it would be recommended to change the style of crimp for the dupont type to latch on to the load cell adapter (such as a panel mount connector). A MOLEX branded panel mounted wire to wire connector (0436400400) could be a better way of avoiding damage to the load cell wires if the wires were to be pulled.	
5.	Now you can add heat shrink on the other end of the wire, which will be slid down and used later.	
6.	On the other end of the wire, we will now crimp the Molex connector housing with Molex crimps which will connect to the PCB. On the PCB, the connector is as follows on the right. Note that the order of the connector from the side with the latch (pin 1) is Red, Black,	 

	White, Green, as shown in the image. In order to crimp these wires, you can follow the same procedure as used for the dupont connectors. Note that the insulation part and wire part of the crimp should be done.	
7.	You can now move the heat shrink into position and use a heat gun or similar means to shrink it into position as before on the other end of the wire. Note to keep a little bit of space between the end of the heatshrink and the connector to avoid pinching the wires together too much.	