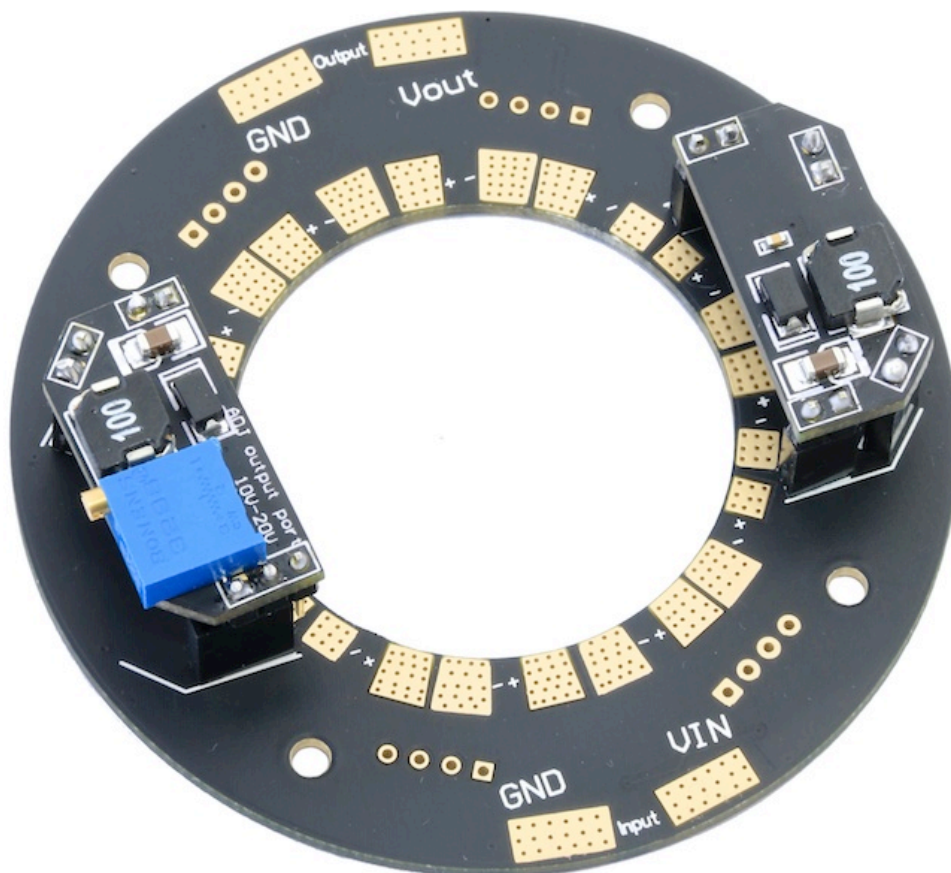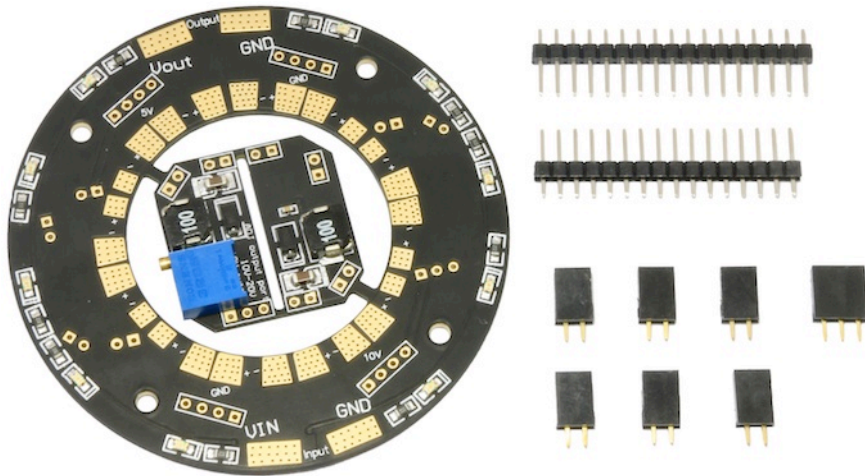# DIY Octocopter Power Distribution Board and Dual UBEC – Assembly Instructions

IMPORTANT: Please read through this manual in its entirety before attempting to assemble or use the PDB.

Parts List:

- PDB
- 2x UBEC
- Male Header Pins
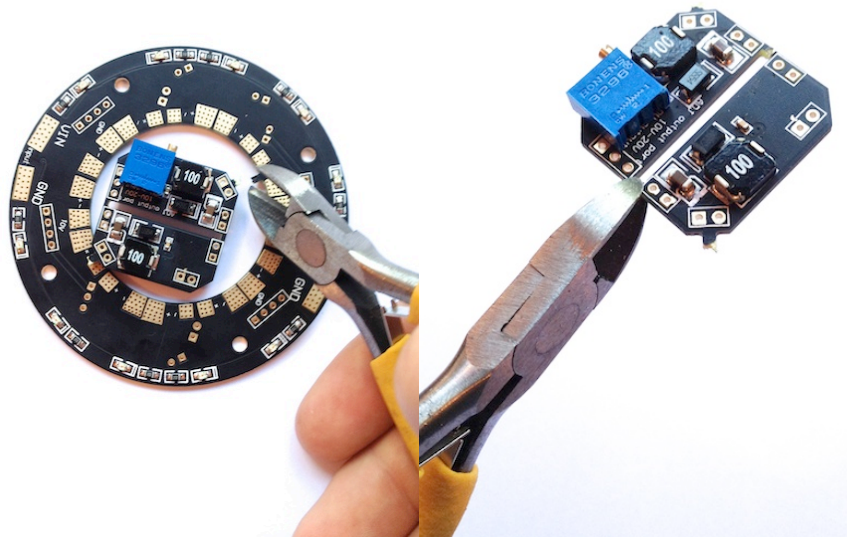- 2 Pin Connector x6
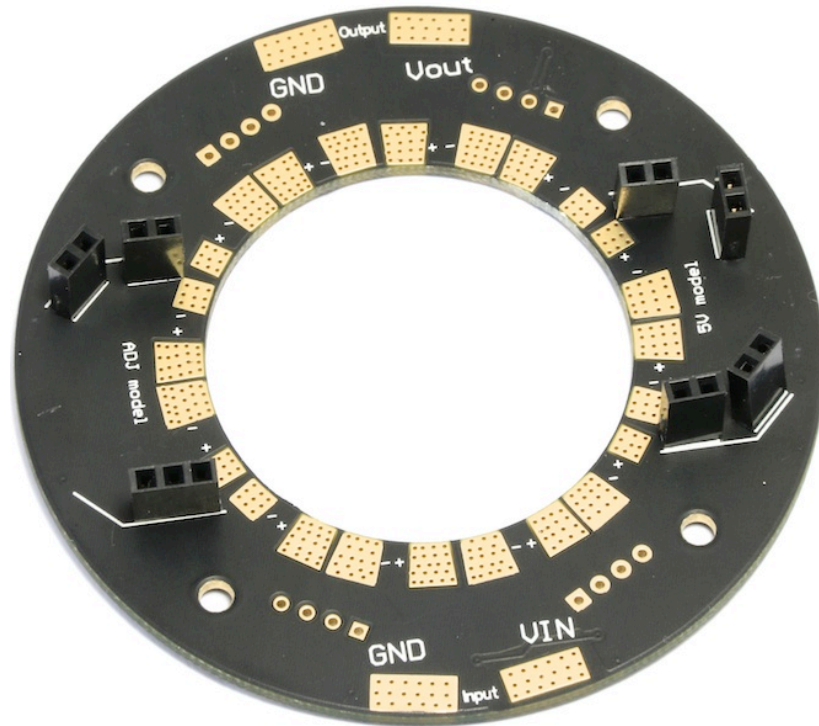- 3 Pin Connector x1

Tools Required:

- Pair of Side Cutters
- Soldering Iron & Solder
- Multimeter
- Jewelers' Screwdriver
- Optional – Needle File

Steps:

1. Using a pair of side cutters carefully remove the UBECs from the centre of PDB and then separate the UBECs by cutting the joining tabs. You may wish to neaten their edges by using a needle file to carefully remove the remains of the tabs.

2. Now solder the 2 and 3 pin connectors onto the PDB. Note that the connectors must sit on side with the markings indicating the positions of the UBECs – see picture below.

2. Next spilt the male header pins into 6 x 2pin and 1 x 3pin and then insert them into the pin connectors. Finally solder the UBECs onto the protruding pins – note that the adjustable UBEC sits on the left side and the 5v UBEC on the right side.
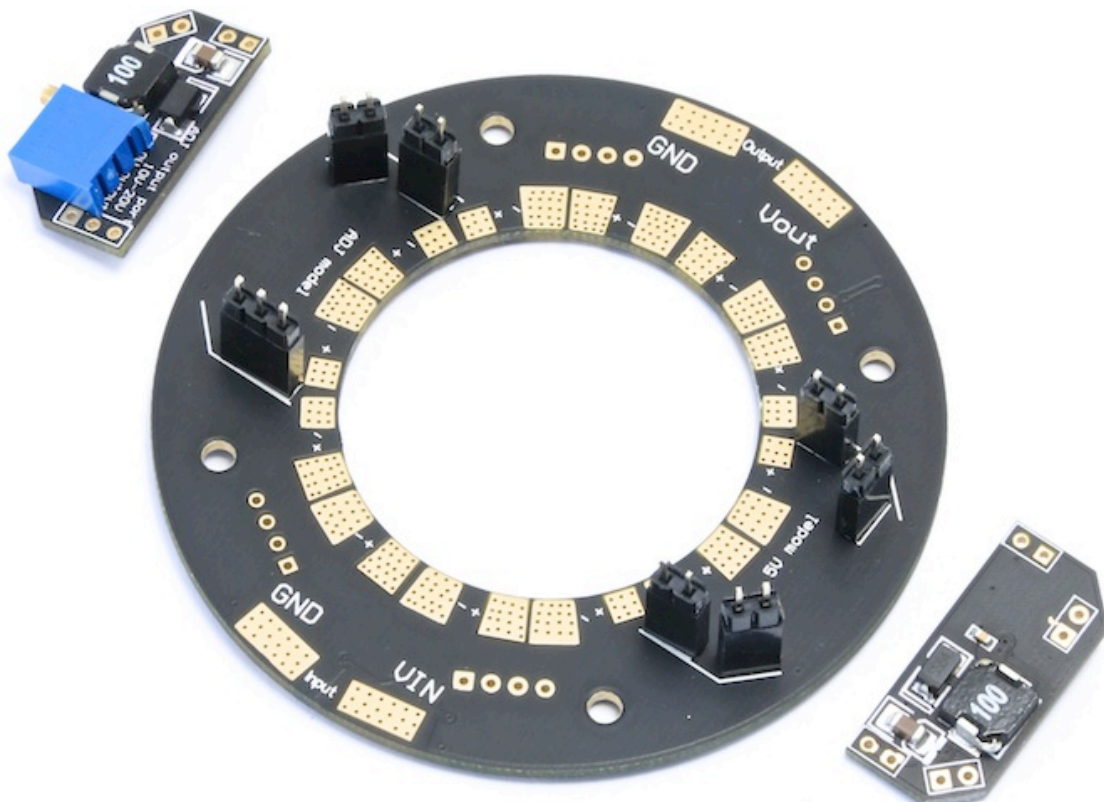
Before using the PDB please observe the figure below.
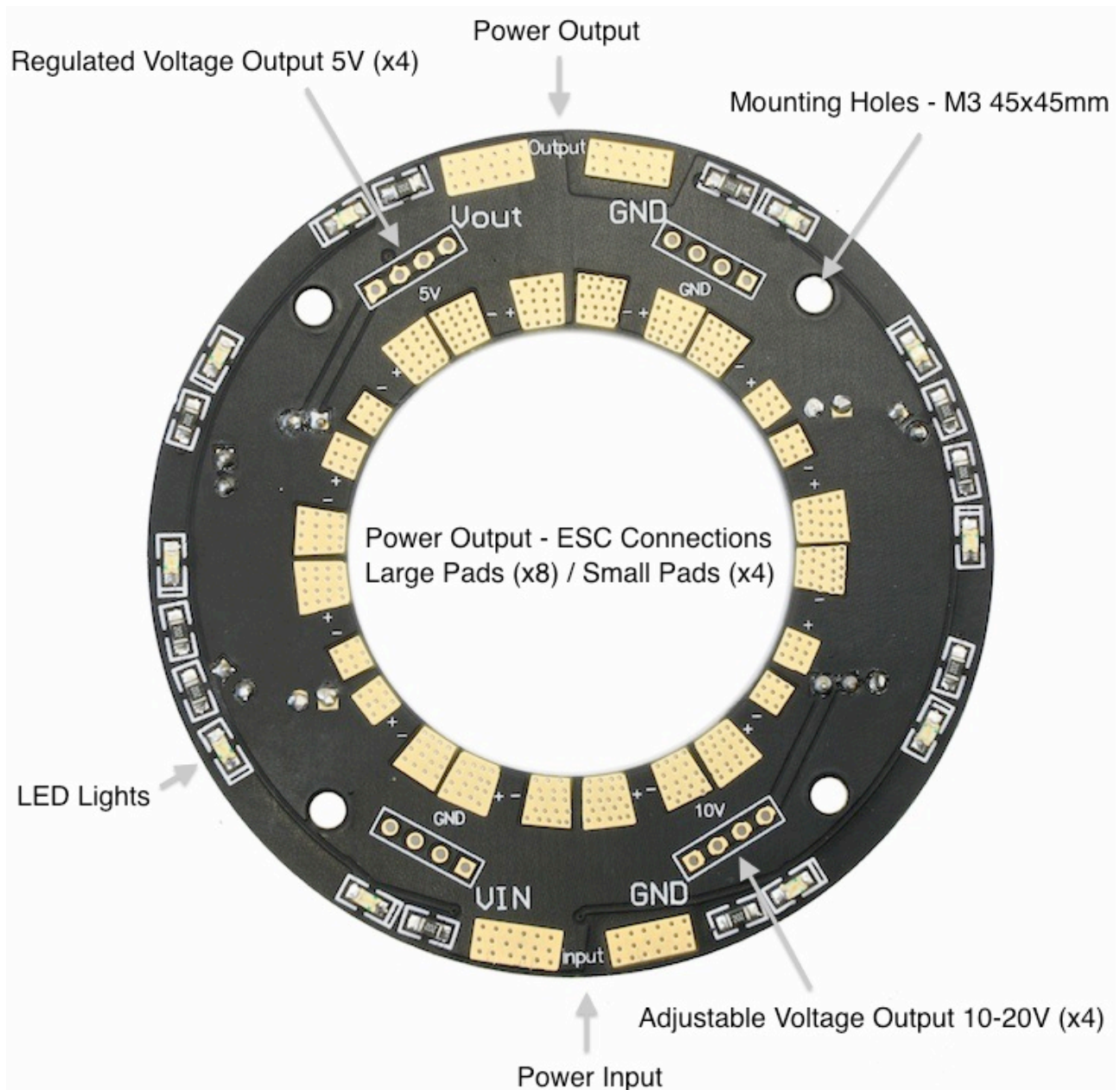
- Power to the board should be provided using the VIN (positive) and GND (negative) connections.
- The board provides 12 power output (8 large solder pads, 4 small solder pads) – see the screen printed labels for polarity.
- Both the adjustable and regulated UBEC provide up to 4 output channels.
- Note that the board LEDs will only light up with the 5V regulator installed.
- To set the output voltage for the adjustable UBEC use a multimeter and a flat blade jewelers' screwdriver to adjust its potentiometer.