Assemble Duet Controller

Assembling the Duet 3D Controller with Fans and Mounts.

Written By: Ryan Christy
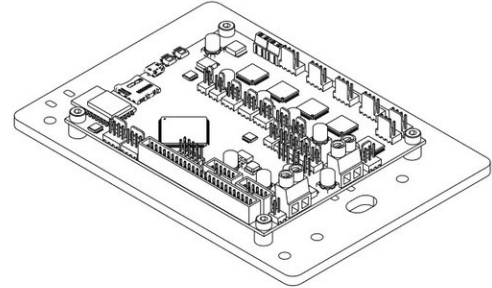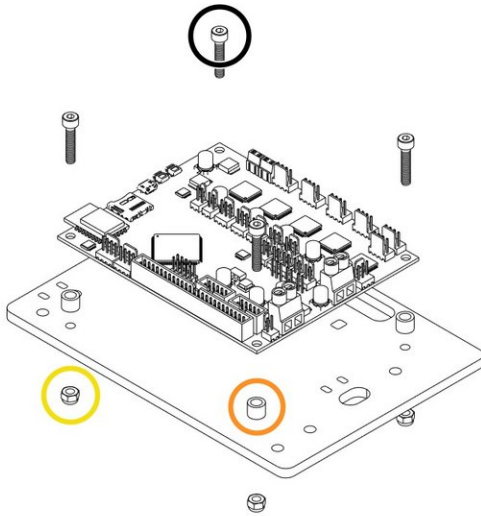

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Step 1 — Fixing the Cable Ties into position

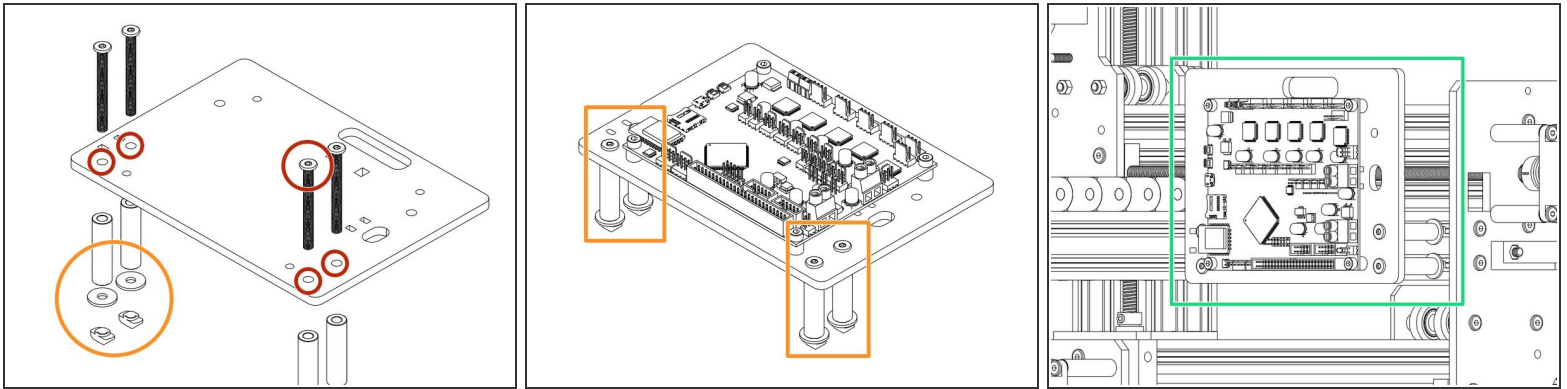⚠ Making sure the board is orientated in the correct way as displayed in the image.

- The Large Cable Tie highlighted in Orange is for the 4 Stepper Motor Cables and the Limit Switches.

- The Small Cable Tie highlighted in Red is for the power cable.

- The Small Cable Tie highlighted in Yellow is only needed if you have the Ethernet Version, and is to secure the Ethernet Cable.

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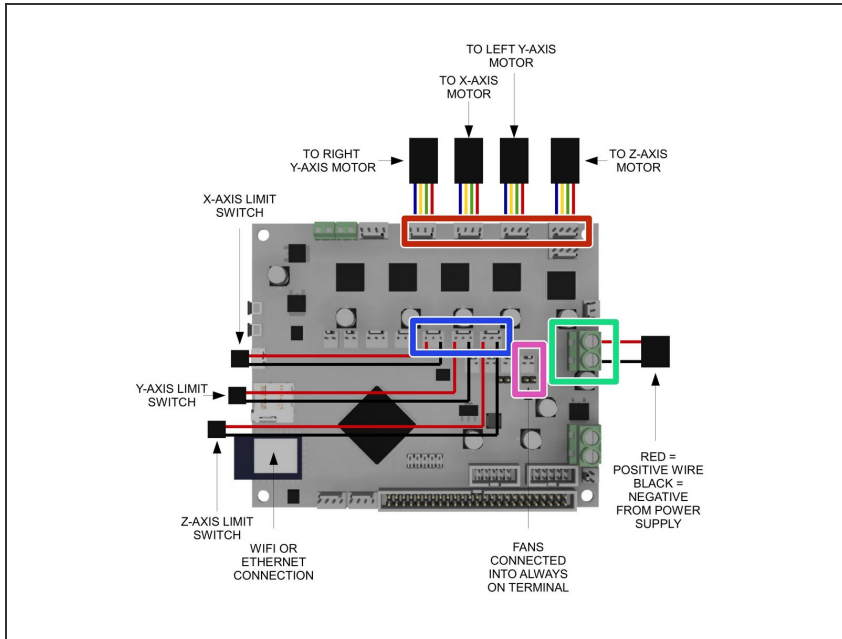## Step 2 — Mounting the Controller to the Duet Mount

- Insert a M4 Cap Head Bolt 20mm through each hole on all 4 corners on the Duet 3D Controller.

   - Onto each bolt slide a 1/4" Nylon Spacer.

   - Now it is time to join the Duet to the Duet Mount. Insert the bolts into the holes on the Duet Mount and secure using 4 x M4 Nyloc Nuts.

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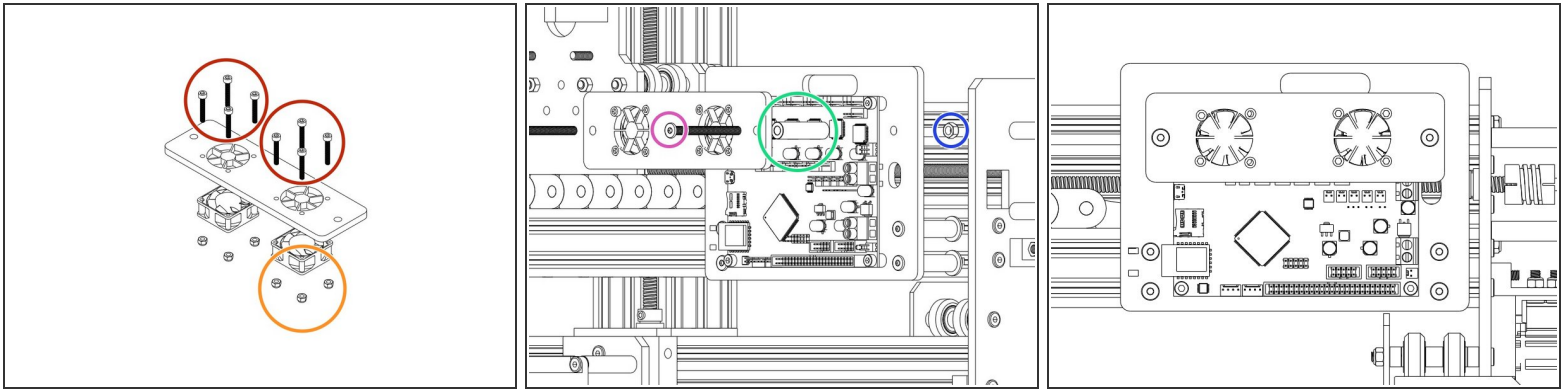## Step 3 — Mounting the Controller to the Machine

- Insert 4 x M5 Low Profile Bolts through the holes indicated in the image.

- Place a 1-1/2" Aluminium Spacers over each bolt followed by a Slot Washer and finally a M5 Drop in Tee Nut.

- Once assembled line up with the 2040 Extrusion on the right hand side of the machine and fix into place tightening the M5 Bolts until the Tee Nuts engage

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Step 4 — Wiring the Duet 3D Controller

- *(i)* The connectors for the Duet controller are keyed, so there is only one way which they can plug in.

- Connect the stepper motor terminals to the points show along the top.

- Using a screwdriver connect the positive and negative power supply wires and screw into place securely.

- Connect the limit switches to the terminals shown.

- The fans have to be connected to the 'Always On' Fan terminal on the Duet before you can mount the fans in place.
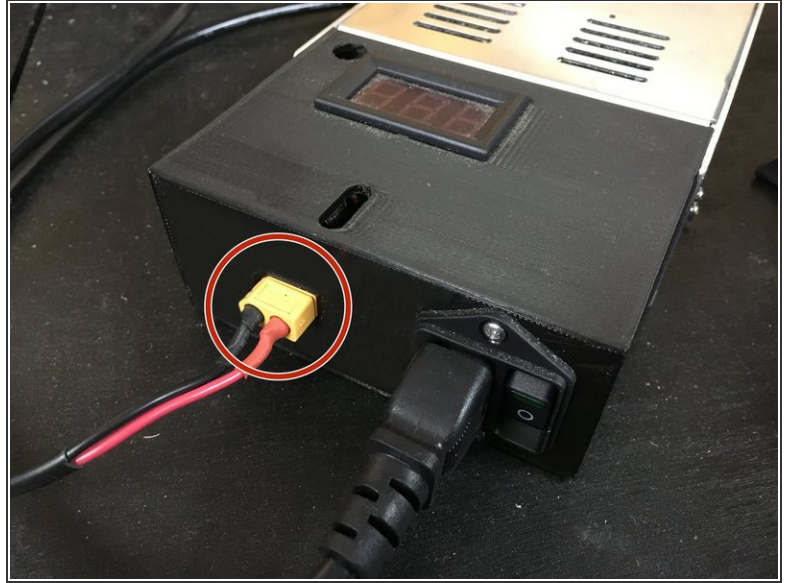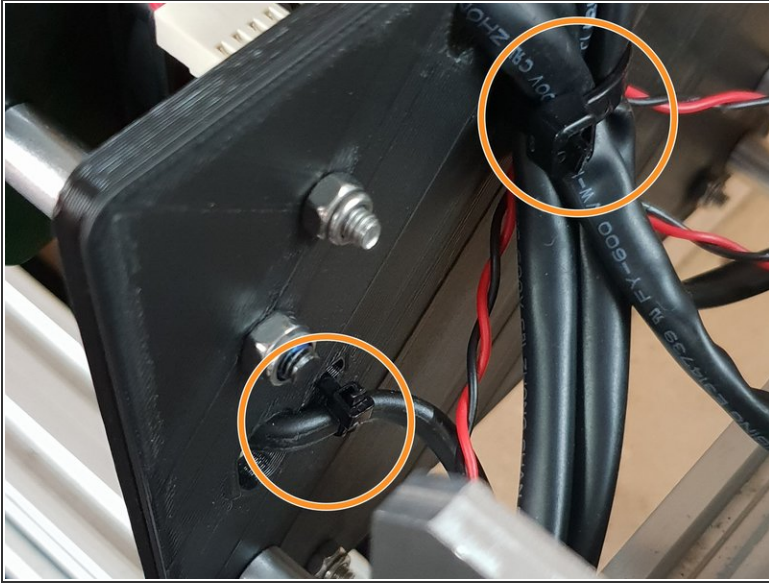
Step 5 — Mounting the Fans to the Board

- ● Use 8 x M3 Cap Head 20mms to fix the fans highlighted in Yellow onto the Mount with the Fan label facing outward.

  - ● Secure the M3 Cap Head 20mm's using 8 x M3 Nyloc Nuts.

- ● Thread 2 x M5 55mm Low Profile Bolts through the fan mount.

- ● Slide the Aluminium Spacers highlighted in Green over the bolts.

- ● Now attach to the Main Board mount using 2 x M5 Nyloc Nuts.

  ⚠ Remember to connect the fans to 'Always On' Fan connection of your Duet Controller before tightening the M5 Nyloc Nuts.

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Step 6 — Tidying your Wires

- Using the already inserted cable ties fix the wires into place securely to prevent any unnecessary movement and to keep the machine looking neat!

  - ⓘ If you have the Ethernet version also secure that.

- Plug the PSU-Output-Power-Cable into the XT60-Male Output on the assembled 24V-360W-Power-Supply.

Thanks for following the guide. Any issues, please contact us!

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