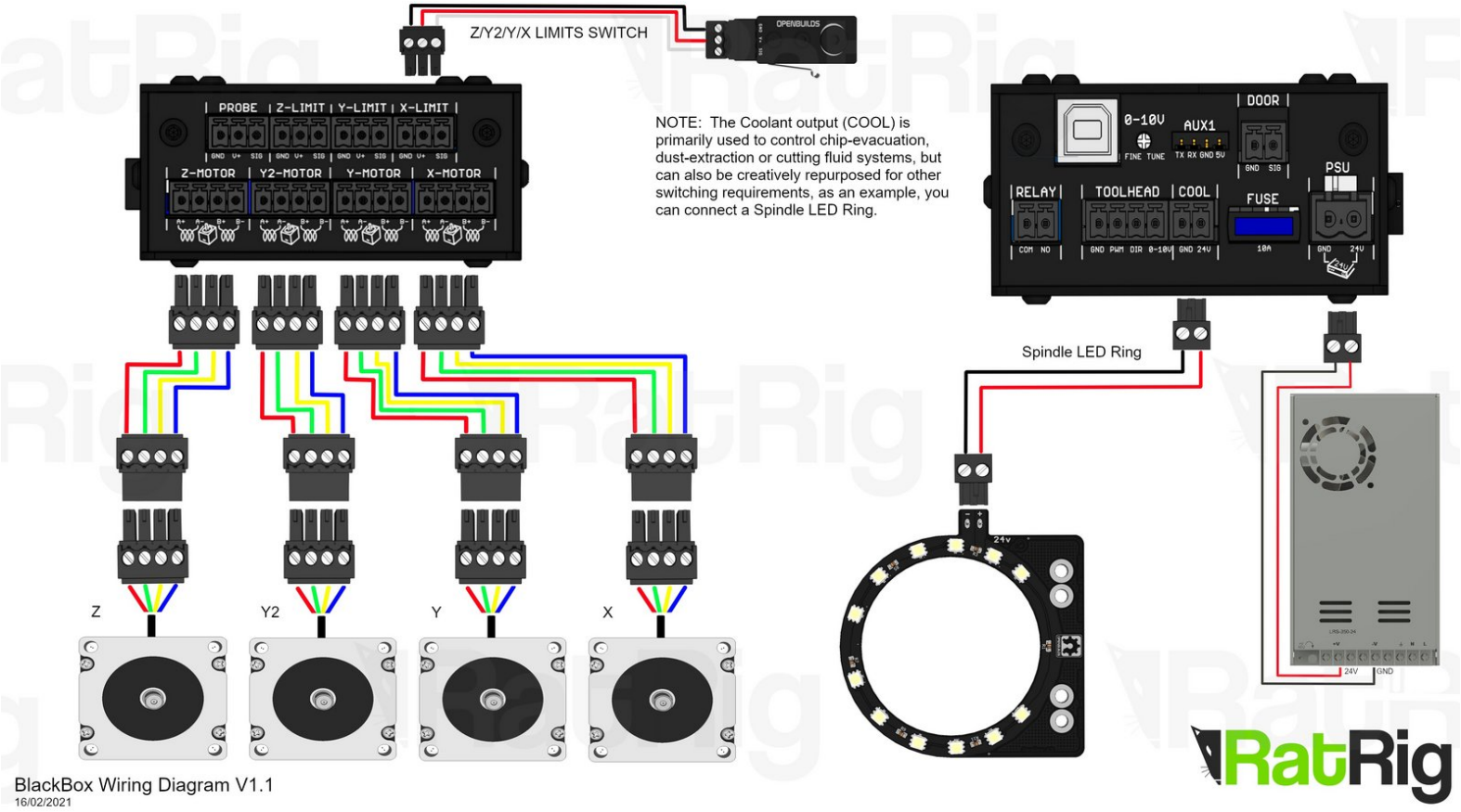
Rat Rig

10. Wiring Diagrams

Written By: Rat Rig



INTRODUCTION

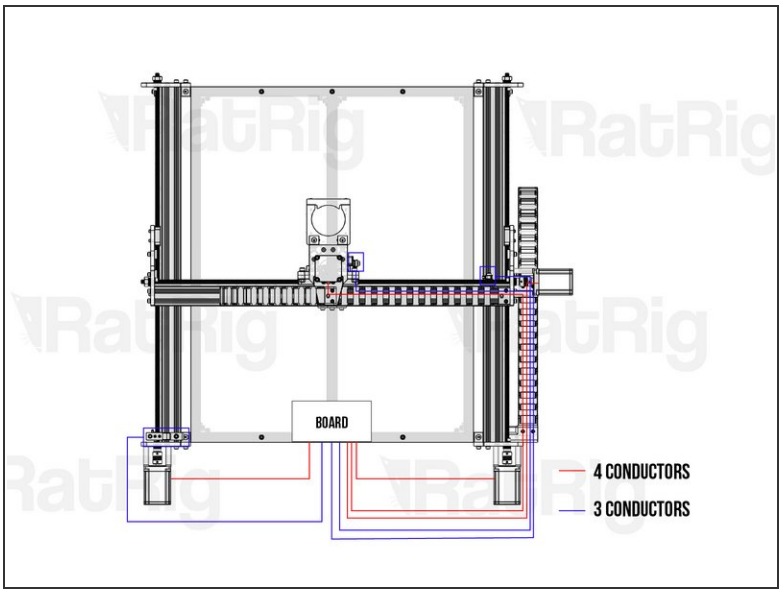
Cable lengths included in the kit assume that the Controller board will be installed at the back of the machine.

Until we provide more comprehensive wiring documentation, you can rely on the OpenBuilds Electronics guide as a reference.

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Step 1 — Suggested cable lengths

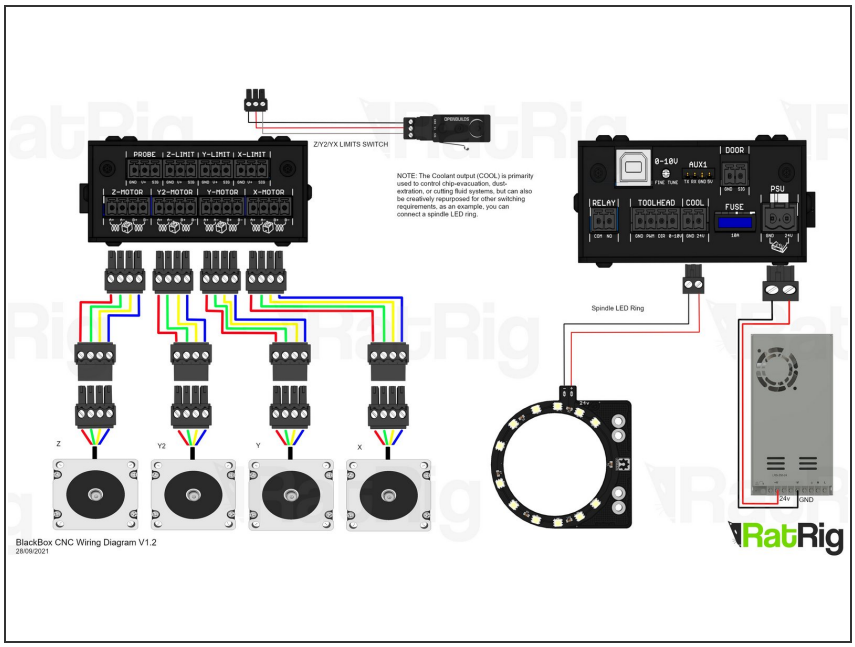
	Lenghts (mm)							
Lead CNC	500x500	Qty	750x750	Qty	1250x750	Qty	1250x1250	Qty
Motos Cable - 4 wires	1000	2	1000	2	1000	2	1000	2
Motos Cable - 4 wires	2000	1	2000	1	4000	2	5500	1
Motos Cable - 4 wires	4000	1	4000	1	-	-	4000	1
Limit Switch Cable - 3 wires	2000	1	2000	1	4000	1	5500	2
Limit Switch Cable - 3 wires	4000	2	4000	2	55000	2	4000	1



⚠ Cable lengths included in the kit assume that the controller will be installed at the back of the machine. You may need to source different lengths of cable if you have other plans for controller placement.

- Your kit ships with 2 long length cables, one with 3 conductors, one with 4 conductors.
- Identify your machine model in the table and cut your cables accordingly.
- Refer to the schematic on the image to understand how these cables should be routed.

Step 2 — BlackBox Wiring Diagram

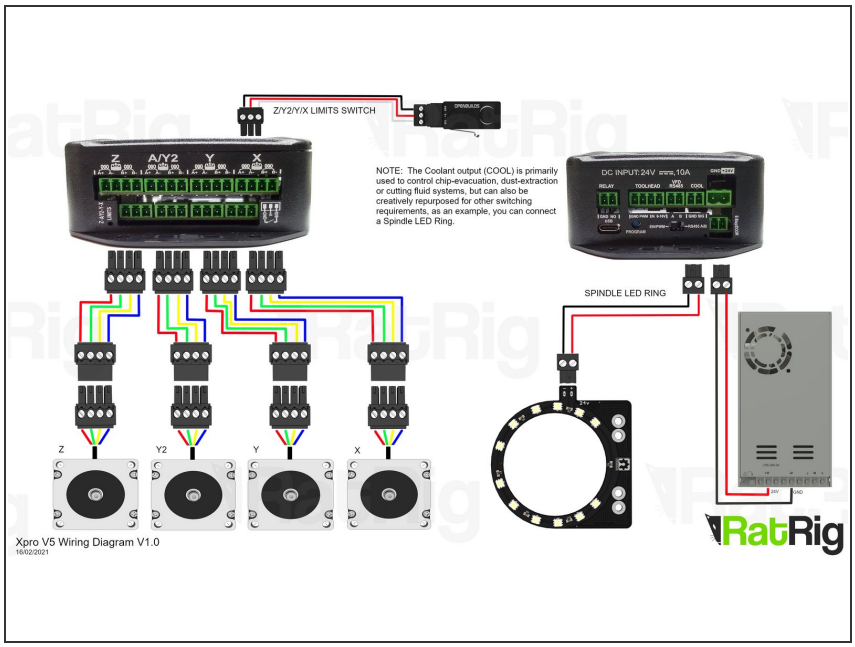


⚠ Wire colour on the diagram serves illustrative purposes only. While wire order should be followed, actual colours on your wires may differ.

⚠ Some cables may have multiple conductors with the same colour. In this situation, the conductors will be numbered, you can use the numbers to distinguish them.

⚠ Diagram assumes you acquired your motors at Rat Rig. If you sourced them elsewhere, check your motor pin-out as it may differ from the pin-out on Rat Rig motors.

Step 3 — xPro V5 Wiring Diagram

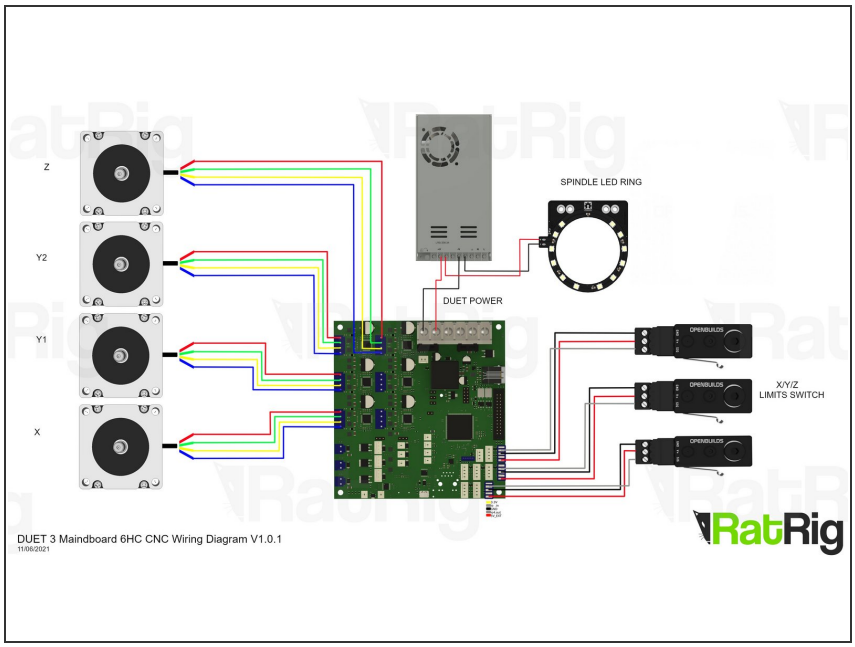


⚠ Wire colour on the diagram serves illustrative purposes only. While wire order should be followed, actual colours on your wires may differ.

⚠ Some cables may have multiple conductors with the same colour. In this situation, the conductors will be numbered, you can use the numbers to distinguish them.

⚠ Diagram assumes you acquired your motors at Rat Rig. If you sourced them elsewhere, check your motor pin-out as it may differ from the pin-out on Rat Rig motors.

Step 4 — Duet 3 Wiring Diagram



⚠ Wire colour on the diagram serves illustrative purposes only. While wire order should be followed, actual colours on your wires may differ.

⚠ Some cables may have multiple conductors with the same colour. In this situation, the conductors will be numbered, you can use the numbers to distinguish them.

⚠ Diagram assumes you acquired your motors at Rat Rig. If you sourced them elsewhere, check your motor pin-out as it may differ from the pin-out on Rat Rig motors.