Electronics

Duet electronics enclosure

Mount the electronics enclosure using the following parts:

Component	Type	Quantity
Duet-enclosure	Printed	1
Duet-enclosure-base	Lasercut	1
M4x16mm button head screw	Fastener	2
M4x8mm button head screw	Fastener	2
M4x16mm countersunk socket screw	Fastener	1
M4 T-nut (not shown)	Fastener	3
Spacer	Lasercut	3

NOTE: Some early Duet boards were shipped with 3.5mm diameter mounting holes. These should be 4.2mm in diameter. If you have one of the affected Duet boards, it is ok to enlarge the holes with a 4-4.5mm drill.

Mount the Duet electronics board in the Duet-enclosure printed part, and put the lasercut Duet-enclosure-base on the back. The two M4x8mm button head screws go in the top mounting holes, and self-tap into the Duet-enclosure-base.

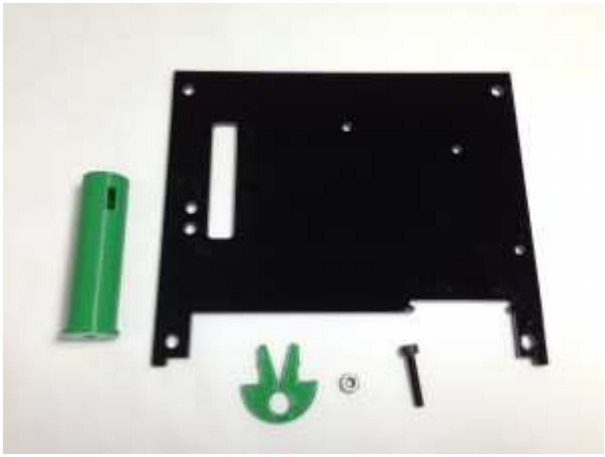
The two M4x16mm button head screws go in the bottom two mounting holes, through the cover, and have a spacer between the cover and the T-nut. The M4x16mm countersunk screw goes through the lug on the side, again with a spacer and T-nut on it.

Mount the Duet enclosure on the end of the Y axis extrusion, near the Y motor. **IMPORTANT** – Make sure the Hot end carriage can pass by it (it will be close), or the X axis will not ‘home’ properly. You can move the X-carriage by hand to test.

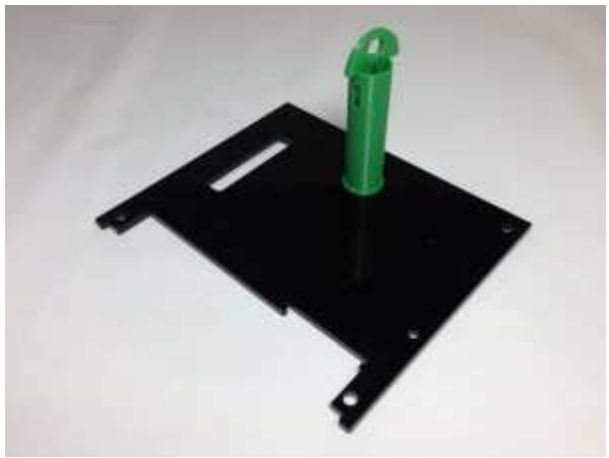
Enclosure rear cover

The rear cover needs the following parts:

Component	Type	Quantity
Duet-enclosure-lid	Lasercut	1
spool-spigot	Printed	1
spool-clip	Printed	1
M3x16mm cap head screw	Fastener	1
M3 nut	Fastener	1



Drop the M3x16mm cap head screw down the spool-spigot, so the thread comes out of the hole in the end. Secure to the Duet-enclosure-lid, through the hole shown, with the M3 nut. The spool clip pushes into the end of the spool-spigot.

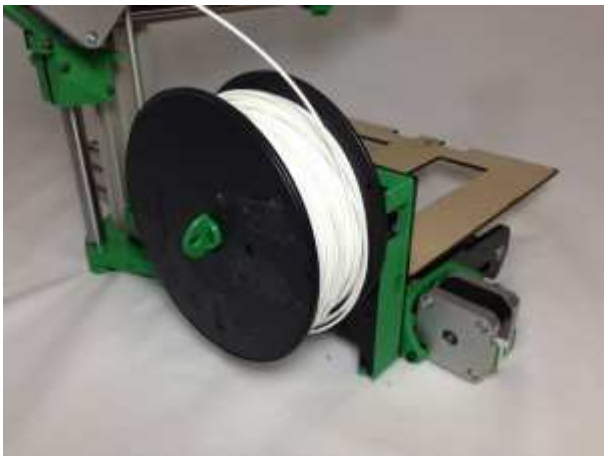


You may need to flatten the two earthing springs on the top of the ethernet connection. To mount the rear cover, clip it into the top securing lugs in the printed enclosure by sliding it up from below.

Slide the cover up, while pushing it flat into the frame, so it rests on the lip of the frame.

Slide the cover down, so the bottom of the cover is secured by the lugs on the printed part. Removal is the reverse of installation.

Pull out the spool-clip, slide on the filament spool, and replace the spool-clip. You will need to remove the cover to connect the wiring.



For the moment, remove the spool and rear cover. It will get in the way while the rest of the printer is built.

ATX power PCB

Component	Type	Quantity
ATX power PCB	Electronics	1
ATX power PCB enclosure	Printed	1
M4x16mm button head screw	Fastener	2
M4 T-nut	Fastener	2
Spacer	Lasercut	2

Mount the ATX Power PCB in a similar way to the Duet. The two M4x16mm button head screws go in the diagonal two mounting holes, through the enclosure, and have a spacer between the enclosure and the T-nut.

Mount the ATX power PCB enclosure on the end of the Y axis extrusion, near the Y idler. Make sure that there is a jumper on the pair of pins that are closest to the white 4-way connector, not on the pair that is closest to the LEDs. This controls the ATX power supply unit (PSU) – without the jumper, the PSU will not turn on.

Now test the ATX PSU. Plug the large 24-way connector and the 4-way connector into the ATX Power PCB. These are keyed, so you can't put them in the wrong way. Plug the PSU into a wall outlet, and turn on. There is a power switch on the back of the

Picture to come.

PSU; turn this on too.

The ATX fan should spin, and the LEDs on the ATX Power PCB should turn on. Once tested, turn off and disconnect the PSU. Leave the PSU connected to the wall outlet for a few minutes to discharge any capacitance.

Picture to come.