



QuadPod Camera Mounting Platform



Thank you for purchasing the Camera Mounting Platform for your QuadPod. The kit takes just a few minutes to install, and will provide a versatile platform for mounting a wide variety of cameras.



Package Contents

- Circular carbon fibre platform
- 8 x 30mm plastic pillars
- 8 x M3 nylon screws
- 4 x M3 nylon threaded studs
- 1 x camera mounting screw
- 2 x double sided adhesive pads
- Instruction manual

You will need:

- 3mm (1/8") drill bit plus an electric drill, or a small circular file
- A small screwdriver

1) Assembly

- 1) The platform structure comprises two components; a set of four support pillars, and a carbon fibre camera mounting plate. The four pillars should be mounted onto the QuadPod first, and then the carbon fibre plate attached to them.

The pillars attach to the QuadPod using the four holes provided for screwing down the dome. These holes are 2mm in diameter, while the nylon screws for the pillars are 3mm in diameter. The holes must therefore be enlarged prior to the assembly. This is best done using an electric drill, although a small circular file can be used instead.

Drilling can be done without disassembling the QuadPod, but a metal object such as a knife blade should be placed below the hole to protect the motor wiring underneath. Carbon fibre often doesn't drill cleanly with a standard drill, leaving slight burring of the hole. However this does not affect the assembly (Photo 1).

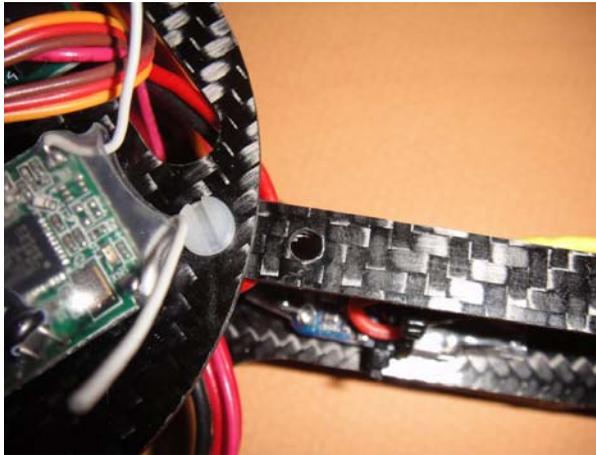


Photo 1: Enlarged mounting hole

The dome may be retained when the camera mount is installed, or it can be omitted. If retained, its four mounting holes will also need to be enlarged. This is best done using the drill bit, twisting it by hand. This is surprisingly easy if the drill bit is sharp.

- 2) Each pillar is made up from two 30mm black hexagonal nylon spacers which join in the middle, forming a 60mm height. The lower sections should now be attached to the QuadPod using the M3 nylon screws provided. This is most easily done by passing the screw up through the hole in the carbon fibre (and through the dome if fitted), then screwing the black spacer down onto it (Photos 2 and 3). Screw down finger-tight only.

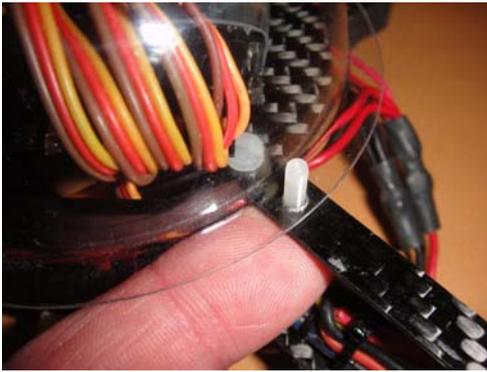


Photo 2: Pass the screw up



Photo 3: Four pillar lower sections

- 3) Next, screw one of the M3 threaded studs into the top of each pillar, and then attach the upper pillar sections (Photos 4 and 5)



Photo 4: Add threaded nylon studs



Photo 5: Then pillar upper sections

- 4) Finally, attach the carbon fibre plate to the top of the pillars using 3mm nylon screws. It may be necessary to gently pull the pillars inwards to align them with holes in the carbon (Photo 6).



Photo 6: Attach the carbon fibre plate

The carbon plate has a 6mm slot cut into it, which can be used for attaching a camera using a ¼” tripod screw (supplied). Depending upon the location of the tripod mounting point on the camera, it may be preferable to align the slot across the QuadPod or from front-to-rear, bearing in mind that the camera should be located as centrally as possible.

Cameras without a tripod mounting point, or with one which is inconveniently located, may be attached with an adhesive foam pad (supplied). These may be cut to size as necessary.

Before attaching the camera, test it carefully to make sure it has a clear view over the front of the aircraft. Move it forwards slightly if necessary.

About the Camera Mount

Unusually, the QuadPod camera mount is located on top of the aircraft. Although counter-intuitive, this arrangement has several benefits:

- a) Surprisingly, this location actually helps to stabilize flight, whereas a payload under the aircraft tends to de-stabilize it. This is because horizontal accelerations of the aircraft cause the camera to be “left behind” due to its inertia, and this has the effect of tilting the aircraft in the opposite direction if the mass is on top, helping to restore a stationary hover. A mass below the aircraft tends to tilt the aircraft in the same direction as the acceleration, thereby enhancing it.
- b) The aircraft is much less prone to toppling over when landing, because it is not raised off the ground by a tall undercarriage.
- c) The camera is protected from most heavy landings, unless it flips over.

The obvious disadvantage is that the camera cannot look downwards. However the great majority of aerial photography actually uses a horizontal camera, so its location on top of the aircraft works very well.

