

Building your dome

A few warnings: Note that a washer must always be used with the bolts – or the bolt will cut into the aluminium section.

Do not look directly into the LEDs. Dark glasses are provided.

A spanner is provided. Do not over-tighten the bolts (as Aluminium is quite soft).

- 1) Place the black mat. Start with the four metal parts for the main flat square. They are marked with red, green, blue and yellow dots to help identify where they fit. Loosely fit a bracket on the inside.
- 2) Add the four legs and tighten the leg brackets once they are aligned. Note that you need to align the metal part of the top of the leg with the top of the side bar.
- 3) Add the two verticals, which have two side brackets as shown. They drop below the square base (so that adjustment is possible for cameras). There are marks on the top of the base square to help to align the camera centre – but these may need adjusting if the camera base is very thick.
An extra bracket goes behind and under the frame for stability.

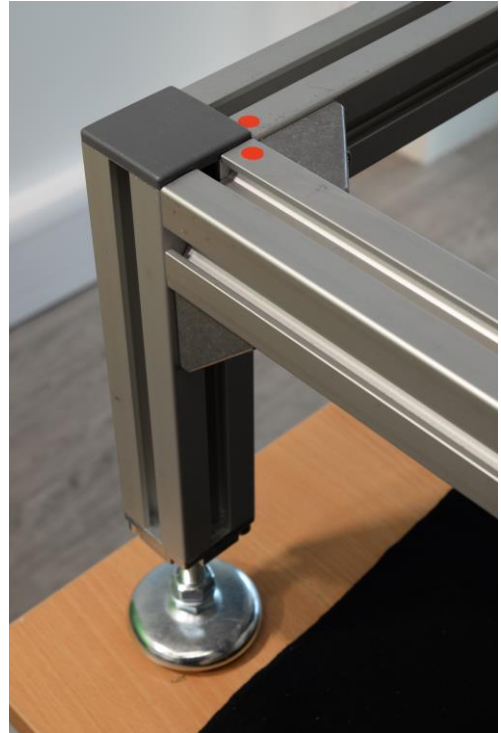


Figure 1 The vertical bars have some adjustment so you need to tighten a bolt when they are vertical. The third bracket underneath can be attached last when the top bar is levelled



Figure 2 a top bar bracket - also note the use of the velcro wrap to tidy cables

- 4) Add the top bar and brackets (which are larger).



- 5) Attach the camera macro slider behind the top bar (so the camera is the “correct” way around). Don’t tighten the two bolts until the dome is in position – so you can centre the camera over the dome view-hole.

- 6) Use a level to make sure each stage is horizontal using feet adjustment and vertical adjustment, then do final tighten. A small bubble level is provided.
- 7) Place the dome quarters onto the square frame in the sequence shown below. Use four loose hand-tight bolts on the sides to hold the quarters in place (shown here as blobs). Once in the correct (even spaces all around) location add the Velcro tapes to the joins.

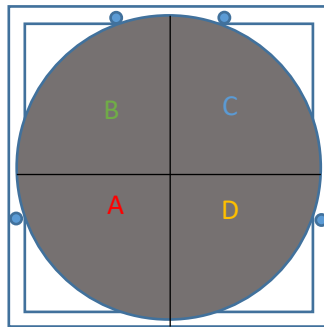


Figure 3 dome retaining bolts - there are four of these which help to keep the dome in the same place. Hand tighten only.



8)

Place the controller in the front-left corner and link the dome quarters to A B C D controller outputs. ***Note that the cables different lengths and changing the order of the plugs requires a new .lp file to be generated.*** Use the small screws in the connectors on the cable to secure them.

- 9) Attach the cloth “skirt” into the inside of the dome (there is matching Velcro inside the dome).
- 10) Attach camera. It is easiest to lower the slider to gain access to the camera bolt. Tighten with a coin (not too tight but enough so the camera can’t be knocked off-vertical if you re-focus). Adjust camera vertical using a bubble level.
- 11) Attach trigger cable from camera into the controller’s trigger socket using and extension lead (2.5mm pin at controller end).
- 12) Attach camera USB lead to PC (if you are using USB, Wifi is an alternative)
- 13) Turn on the controller mains adaptor then plug its round power plug into the controller and test with the Focus button (only a few LEDs will illuminate).
- 14) The lab-jack lift can be used to place objects under the dome. Turning the lab jack handle to raise the object is usually the best way to focus. As the object will be quite high, be careful not to knock it off if you slide the lift back towards you.

Enjoy! Contact Kirk Martinez km@ecs.soton.ac.uk if you have queries.