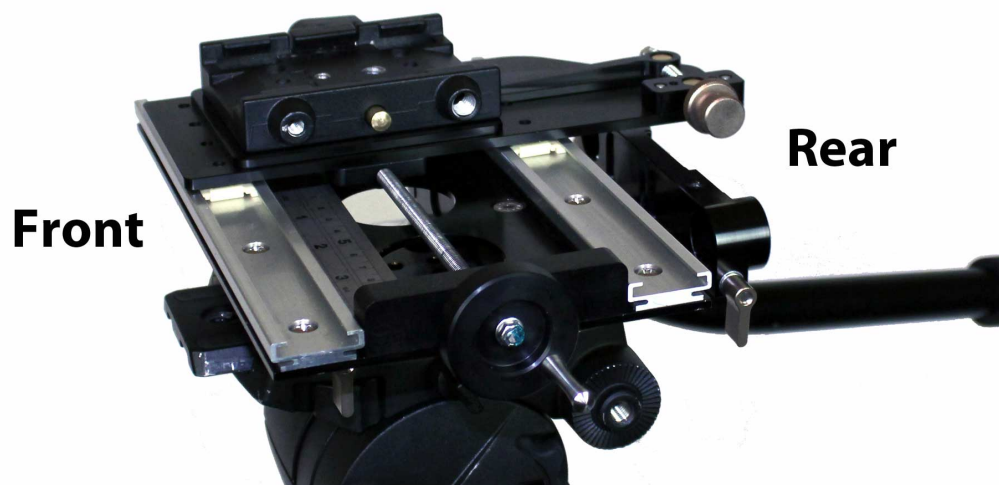


**Below is a step by step guide to assembling the Hurricane-Rig. Remember that this is a precision optical instrument. Excessive force can bend critical parts. If treated well it should give many years of reliable service.**

**Further Information can be found at [www.hurricane-rig.com](http://www.hurricane-rig.com)**

## **ASSEMBLY STEP 1:**

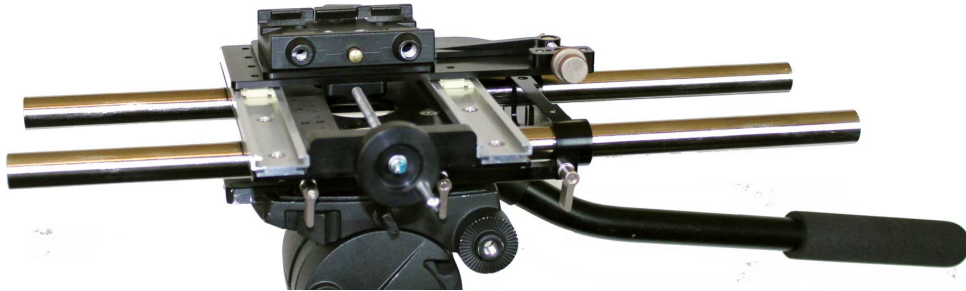
Start by attaching your tripod plate to the base of the top camera platform assembly (which incorporates the interaxial and convergence adjusters). It is best if your tripod plate is attached towards the front of the assembly as the rig will tend to be front heavy. The front of this assembly is the end away from the small convergence adjuster knob.



Once the tripod plate is attached, mount the top camera platform on your tripod. It is easiest to build the rig when it is mounted on a tripod.

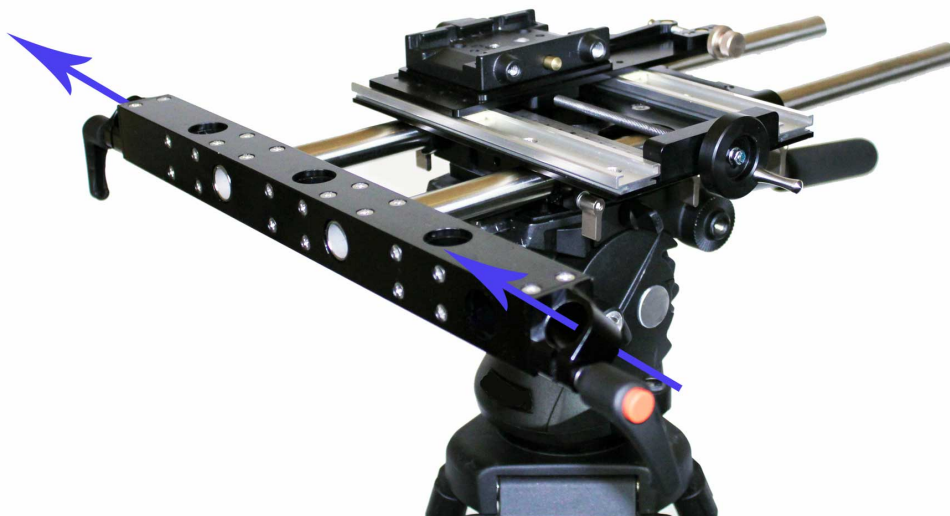
## STEP 2:

Insert the long stainless steel rods into the top camera platform. You may need to loosen the gold locking tabs. Do not tighten the locking tabs at this stage, simply insert the rods into the camera platform assembly.

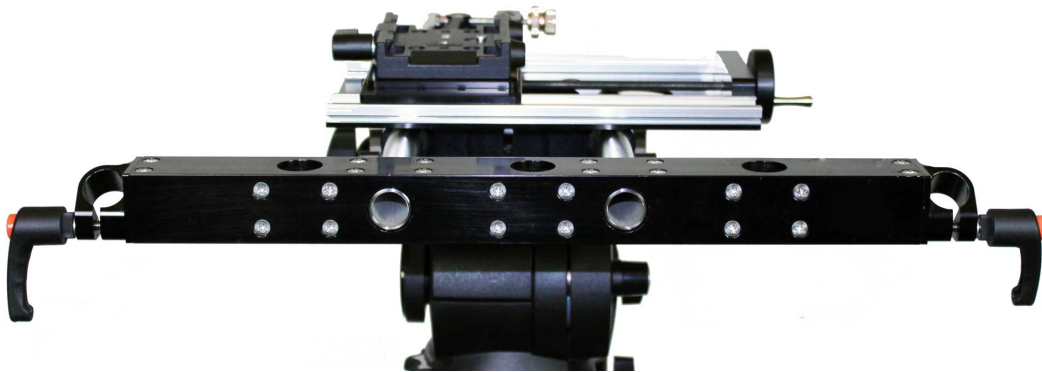


## STEP 3:

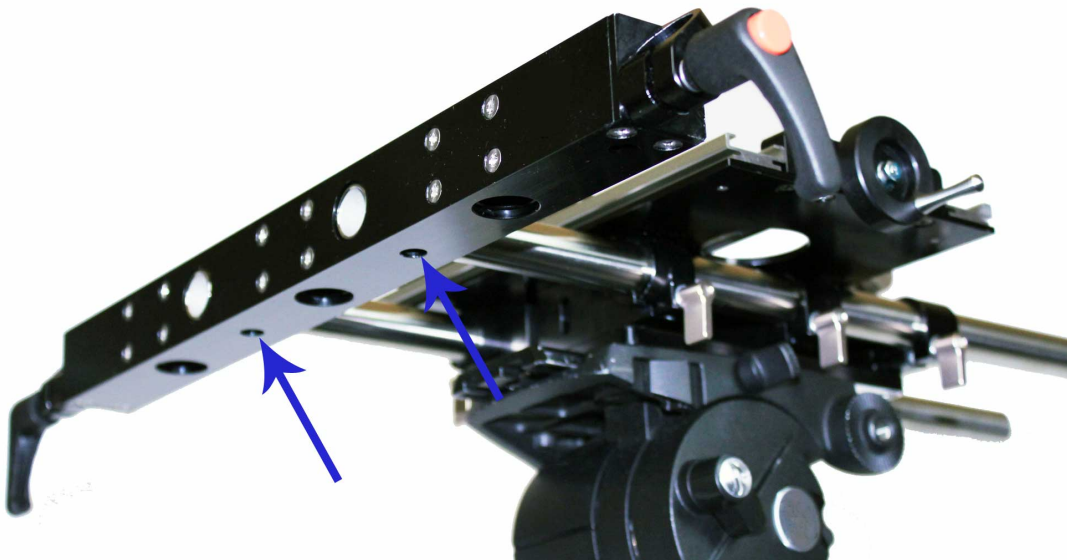
Now attach the square front rail. Note the orientation of the end 45 degree brackets and the position of the vertical holes. The hand knobs should be to the front and low, so that the hole in the 45 degree bracket points forwards and up. See the pictures below to confirm the location of the mounting holes for the upper and lower stainless steel rods.



Confirm the orientation of the front rail. When the rig is viewed from the front there should be a vertical hole immediately to the left of the each of the holes that the top rods are inserted into. Refer to the picture above and the picture in step 4 if you are unsure.



The rods should be flush with the front of the square front rail. Secure by tightening (clockwise) the two allen (hex) head bolts recessed into the underside of the rail. Do not over tighten, use a short allen key and hand pressure only. Check the square rail assembly is firmly attached to the horizontal rails before proceeding to the next step.



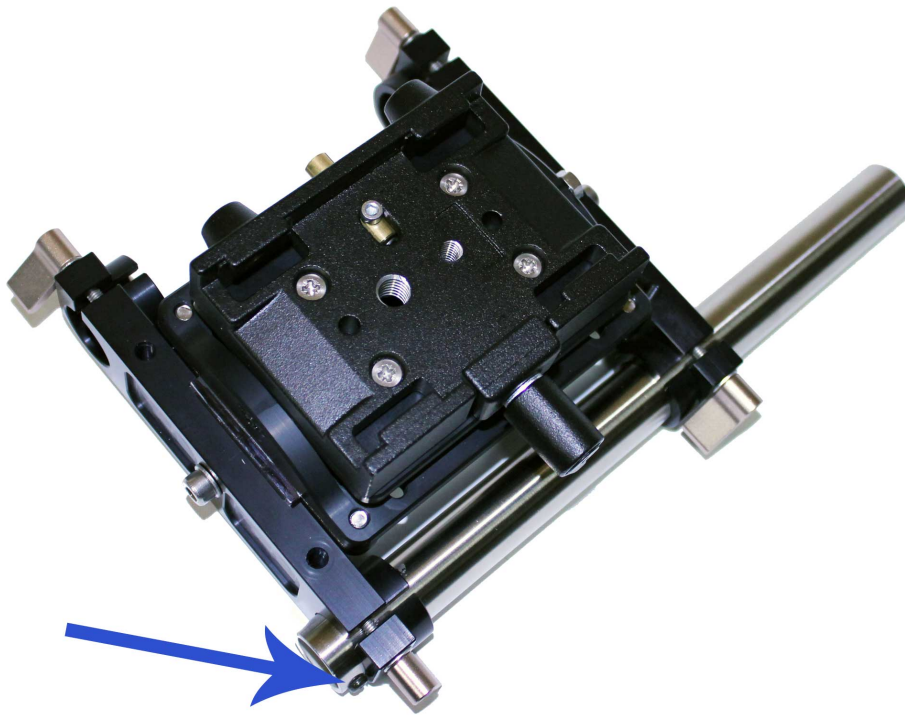
Gently tighten the 6 gold locking tabs on the top camera assembly before proceeding to step 4.

## STEP 4:

Now add the lower camera platform rods and assembly to the square front rail. This should be slightly to the left of the main rods as can be seen in the pictures below. Start by inserting one of the short stainless steel rods into the square front rail so that the safety stop screw is at the top.



Next take the lower camera platform assembly and insert the remaining short stainless steel rod into this as shown in the picture below. The safety stop screw (arrowed) will be at the bottom of the assembly. Tighten the two gold locking tabs to secure the rod in position, the other two tabs should be loose.

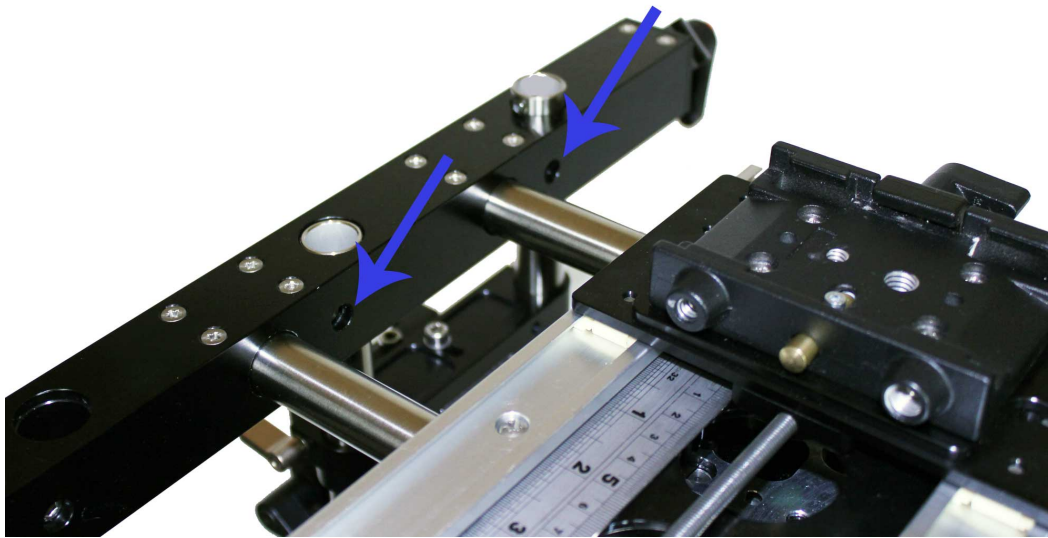


Now slide this assembly on to the short rod attached to the front square rail so that the both short stainless steel rods now go into the square rail. Secure the remaining two gold locking tabs on the lower platform assembly using finger pressure. All four gold tabs should be finger tight.





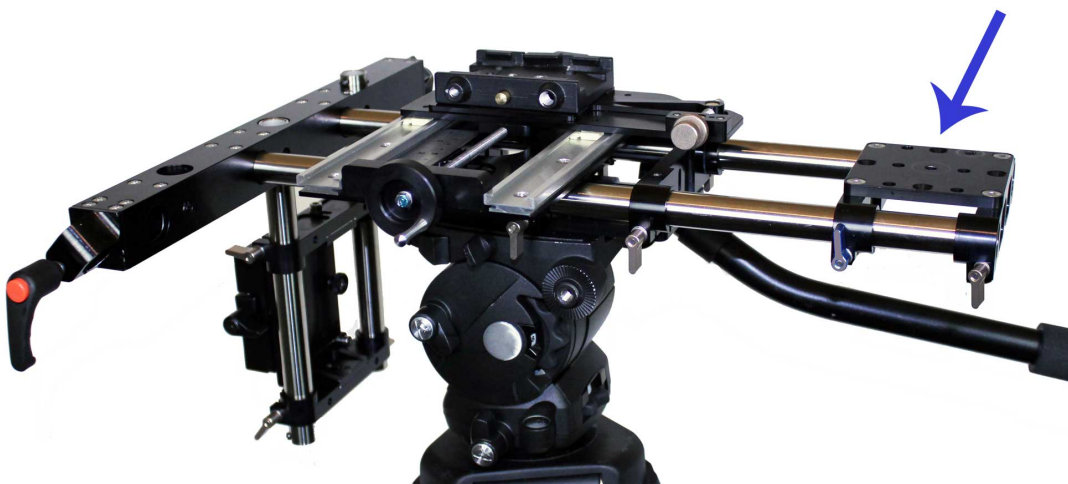
The safety stop screw will prevent the lower camera platform assembly from dropping out of the square rail while you tighten the two allen (hex) head securing bolts (arrowed below) using only hand pressure, do not over-tighten.



It is also possible to mount the lower camera to the left of the upper camera using the left hand vertical holes. However this is not the optimum design position and should only be used if you need left view straight through and right view via the mirror.

## **STEP 5:**

Add the accessory plate to the end of the top rods, secure the four gold locking tabs.



## STEP 6:

The mirror frame is mounted next. This can be tricky. The round shafts at the bottom of the mirror go in to the 45 degree brackets on the ends of the square front rail. The mirror is orientated so that the metal corner fillets of the inner mirror frame face forwards and the Genus logo on the top of the frame is the correct way up. The shafts have to go very evenly into the rail brackets. Do not force the shafts into the brackets, just ease them in by the same amount each side keeping the mirror assembly square with the front rail. Be careful not to touch the mirror glass. Gently tighten the hand knobs once the mirror shafts are inserted into the brackets.



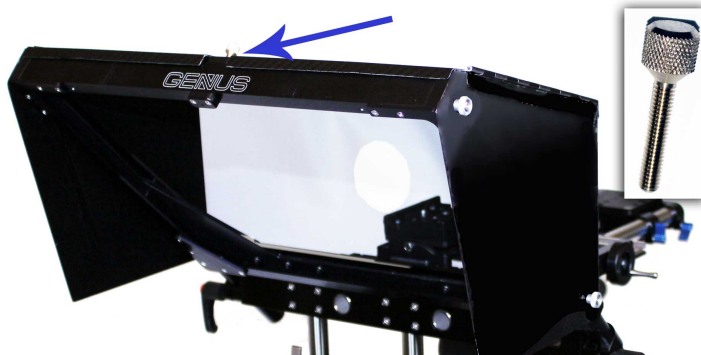
## STEP 7:

Attach the fold flat hood to the mirror frame using the 2 plastic thumb screws (arrowed below) on each side of the mirror frame, 4 screws in total, again these need only be finger tight. The sliding camera baffle should be inserted into the guides on the back of the hood prior to securing the hood to the frame. The neoprene rubber donut faces the rear of the rig.



## STEP 8:

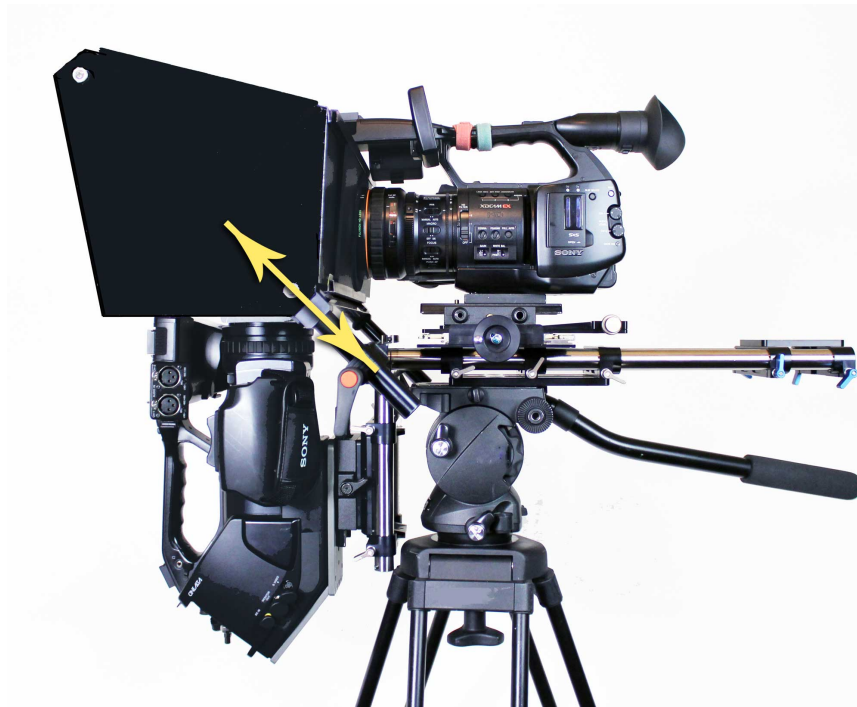
Insert the small brass mirror tilt adjuster screw into the hole at the top of the mirror frame. If the threaded hole for this screw is on the inside of the mirror box, then you have installed the mirror assembly the wrong way around. In this case return to step 6 and install the mirror frame the other way around. Never over tighten this screw, it should only ever be gently screwed in with light finger pressure.



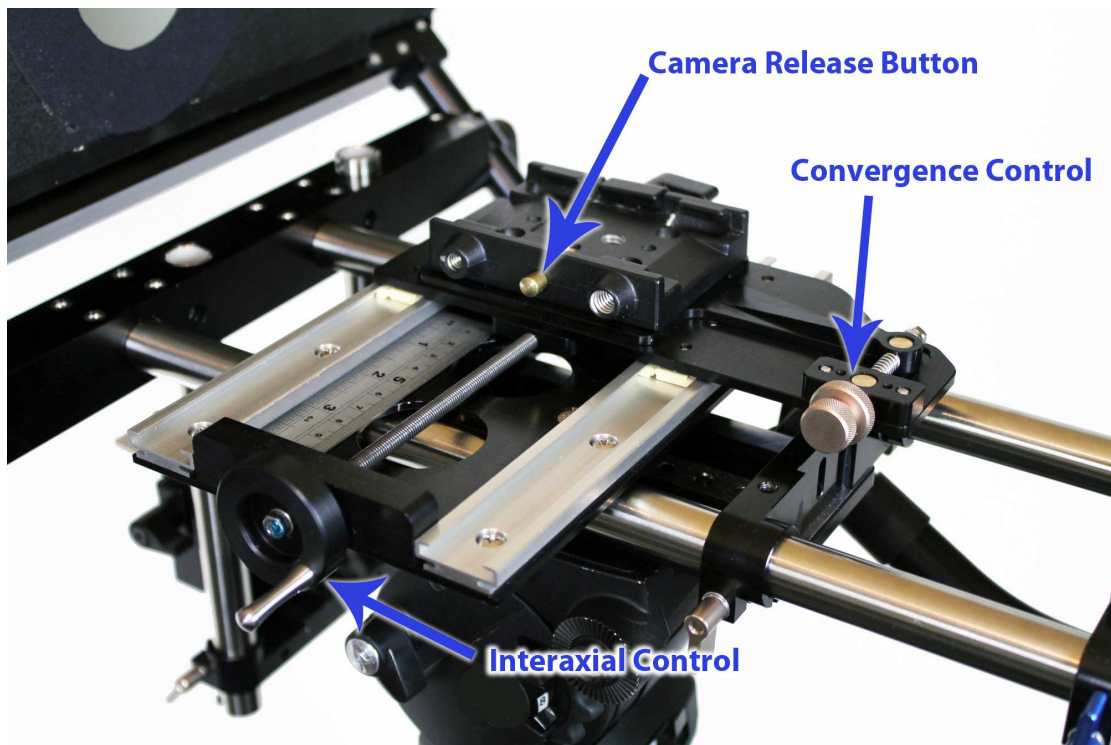


## STEP 9:

Finally mount the cameras by attaching the quick release base plates to the cameras and then slide the cameras on to the rig. Slide the top camera up to the baffle so that its lens just goes through the hole in the baffle. For cameras with larger diameter lenses you may need to trim the neoprene donut using a sharp knife or scissors. You may need to adjust the mirror box height to find the optimum height. Ideally the lens of the top camera should be towards the bottom of the mirror box.



Note that when removing the cameras or the camera plates you need to press the small brass button on the side of the quick release platform. In addition the position of the locking knob can be changed by pulling the knob out and rotating it before releasing it again.



The cameras/lenses should be centered over the mounting plates for maximum stability. The entire camera platform can be slid along the rod by slackening the gold tabs. Once you have positioned the cameras and camera platforms tighten all the gold tabs, 6 on the top platform and 4 on the lower.

This completes the rig assembly. You should now proceed to align the cameras.

When dismantling the rig, remember to remove the mirror tilt adjuster before attempting to remove the hood.