

Attaching the Camera

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The basic idea: We want to position the camera's center of gravity about .75 inch behind the centerline of the post fore-aft (as seen from the side) and directly over the centerline of the post side to side (as seen from the front or rear). We do this to facilitate both static and dynamic balancing. We fine-tune the placement of the camera as we balance the rig. See page 39.

First, center the side to side and fore-aft adjustments of the camera mounting platform, using the knobs, the remote control, or better yet, flip the centering switch to "C" and the motorized stage centers itself!

Attach all the accessories to the camera, including lenses, loaded film magazines, focus motors, obie lights, transmitters, etc. Don't worry too much if you must add your motors or other accessories after you have attached the dovetail plate.

Using a rod or pencil, find the c.g. of the camera, both fore-aft and side to side. Temporarily mark this with pieces of tape.



Finding the camera's fore-aft center of gravity.



Finding the camera's side to side center of gravity.

Attach the long dovetail plate to the bottom of the camera, centered as closely as possible under the camera's c.g. Use two screws to keep the plate from rotating.



If possible, attach a second dovetail plate to the top of the camera, directly above the other dovetail. This may require additional hardware, such as a special low mode bracket for your camera.



Place the camera above the camera mounting platform. Be sure the locking lever is fully open. Angle the left edge of the dovetail into the holder. Be sure to keep everything parallel. Lower the right side into the holder.



Dovetail locking lever fully open.

If the camera won't drop fully into place, be sure the left side of the dovetail is fully inserted, all is parallel, and the locking lever is fully open. It's a close fit.

After the dovetail drops into place, close the locking lever half way and slide the camera until the fore-aft c.g. mark is about .75 inches behind the centerline of the telescoping posts. Post #2 is 1.580 in diameter, so you can use the back of the post as a guide for placing the camera c.g.



Push the locking lever forward to fully lock the camera into place. You are now ready to static balance the sled.



Closing the locking lever.



Push firmly.

The dovetail locking lever has three positions (see page 8): 60° back is fully open and the dovetail plate can be inserted or released. At the half way or 90 degree position, the dovetail can slide back and forth for gross positioning of the camera, but it cannot be released. All the way forward is the locked position.

Sliding the camera with the locking lever at 90 degrees. With the locking lever in this position, the dovetail can slide but cannot be removed.

Tip: If you add your focus motors at this point, remark the camera c.g. If the side-to-side position drastically changes, you may have to reposition the dovetail plate on the camera.

Big, important tip: Wrap up, tie up, tie down, Velcro, or gaffer tape all cables so they don't flop around and mess up your precise balancing. If you have cables that run to the outside world, leave them off at this point.



Camera c.g. .75" behind center post – fore-aft.



Camera c.g. centered over post – side to side.