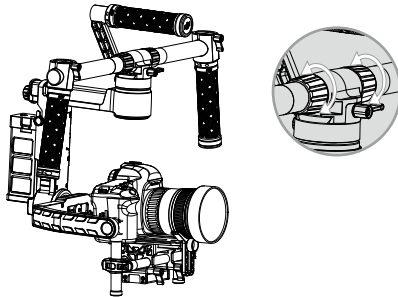


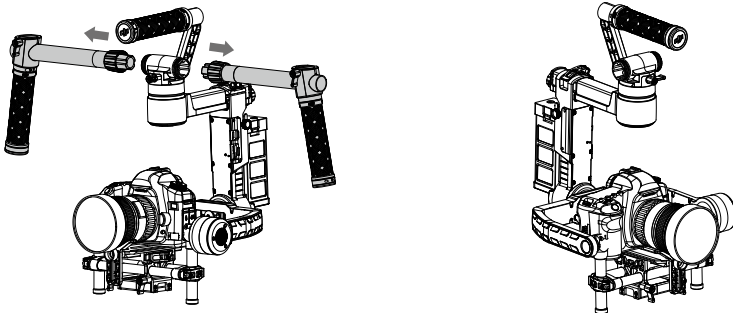
Handle Bar Adjustment

The customizable handle bar of the Ronin-M can be removed by following the steps below, if required.

1. Loosen the two screws as shown.




2. Remove the grip from the handle bar.
3. The resulting setup is shown below.



Balancing

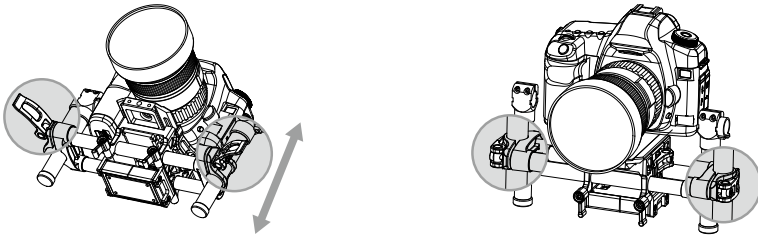
To achieve the best performance from the Ronin-M, proper balancing is necessary and a must. Accurate balance is critical in shots where the Ronin-M will be subjected to extreme movements or accelerations (running, horseback riding, biking, car mounts, helicopters, etc.) Proper balance will also offer a longer battery runtime. There are 3 axes that need to be accurately balanced prior to powering the Ronin-M on and setting up the software.

 The camera needs to be fully setup with all accessories prior to installing and balancing the camera on the gimbal. If you are balancing the camera with a lens cap on, be sure to remove the lens cap prior to balancing. Be sure whenever balancing the camera that the Ronin-M's power is turned off.

Step 1: Balancing the Vertical Tilt

To adjust the vertical balance, you will need to change the camera's vertical position. Adjust the height of the crossbar to achieve vertical tilt balance.

1. Rotate the Tilt Axis so that the camera lens is pointing skyward as much as your lens setup will allow and loosen the two vertical adjustment tabs. Gently slide the camera mount crossbar forward or backward until the camera remains pointing skyward when released.
2. Tighten the tabs and manually rotate the assembly simulating tilt to ensure there is no binding in the tilt motor. When proper balance is achieved, you can rotate the camera to any tilt angle, and it will stay in that position.

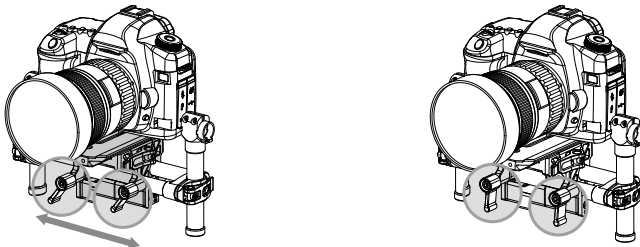


Ensure the measurement marks match up on either side of the vertical bars. If they do not match up, the assembly could possibly be skewed higher or lower on one side, which would cause the tilt motor to bind.

Step 2: Balancing the Roll Axis

Balancing the camera left-to-right on the Roll Axis is also required. When the proper left/right roll balance is achieved, the camera will stay level.

1. Loosen the 2 lock-knobs to allow the camera and mounting plate to slide left and right. Slide the camera left or right until the Roll Axis remains level.
2. Tighten the 2 Lock-knobs to lock the camera mounting plate in position.



When adjusting the roll balancing position of the camera, only loosen the 2 lock-knobs a few turns to allow the camera base to slide. Do not loosen the lock-knobs excessively.

Step 3: Balancing the Tilt Axis

We also need to balance the camera fore and aft on the Tilt Axis. When the proper fore and aft tilt balance is achieved, the camera will stay level when you remove your hand (hold the roll axis at the same time).