

Topic 101

Mock Steadicam Practicing

Achieving **dynamic balance** is crucial for steadicam operation to be properly executed because it keeps the camera level during movement. A steadicam rig makes it possible for camera movement to be achieved without using a crane or dolly, and it eliminates the shakiness of handheld footage. It allows an operator to walk with a camera while mechanically isolating his movements, thus creating a smooth effect. But, the rig needs to be properly balanced in order for this to happen.

The Parts of a Steadicam Rig

In order to properly balance a steadicam rig, you must first understand its parts. The center and most crucial aspect of the steadicam is the post. At the top of the post is the stage. This is where the camera gets mounted. There are also knobs on the stage that are used for adjusting the camera mount for balancing, but there will be more on that later.

At the bottom of the post is the monitor clamp and the battery mount. The gimbal and gimbal handle are located at the center of the post. The gimbal handle attaches the rig to a vest that the operator wears. When the operator is not working with the camera, he can remove the gimbal handle from his vest to detach the rig.

Achieving Dynamic Balance

In order for the operator to use the rig, it needs to be properly balanced. This begins with the mounting of the camera. You want to find where the camera's center of gravity is. You then want to mount the camera so that the center of gravity is positioned slightly behind the center of the post. The positioning of the camera can be adjusted with the knobs on the stage.

The steadicam needs to be balanced on three axis's: top to bottom, side to side, and forward to aft. If one of these axis's is off balance, then the operator will have difficulty operating the rig.

Once the camera has been mounted, you can add the monitor and batteries to the bottom of the post to balance out the weight between the top and the bottom. When adding these, you want to keep them centered and balanced so that the weight distribution is equal in regards to side to side and forward to aft.

If the rig feels bottom or top heavy, you can adjust the gimbal to balance the load. If that is not enough, then there are mounts on the rig where weights can be added.

Once dynamic balance is achieved, your shots used with the rig will have no problem staying level during movement.