

Tips on Achieving a Good Video

Vibrations

In most cases, the camera and mount assembly can be secured to the roll bar, and you can immediately begin shooting acceptable video. In a small number of cases, the first arrangement does not work and you will need to do some experimentation.

Any mass has a frequency range within which vibrations are amplified. We have learned to use certain rubber or plastic mounting devices to control these vibrations, such as today's engine mounts. Race cars replace stock engine mounts with solid mounts for better power transmission, but this lets the engine vibrations continue into the car's chassis. Any car, engine and camera will have a different frequency at which vibration becomes a problem. Since our mount is universal it may not control your particular setup.

The problem these vibrations cause is not in the lens of the camera, but mainly in the tape transport system. If we could transmit our video to record the image outside of the car, as ESPN does, then we would minimize the vibration problems.

Controlling Vibrations

To best control these vibrations, first, make sure that the camera is set on a high shutter speed, manual focus (at or near infinity), and wide angle lens. If a vibration problem exists, try moving the mount a small distance away from its current location. Adding a thin piece of rubber (such as a piece of inner tube) between the clamping assembly and the roll bar might help. Some cameras have a tendency to rock at the mounting base (bottom of camera). This is an area that may need to be shimmed.

In open cockpit cars, the camera and mount should be protected from the wind and debris by a clear plastic shield. This shield must be independent of the camera and mount.

Some cameras have a vibration-dampening feature called *Image Stabilization*. Some drivers have reported that they had to shut this feature *off* to achieve better video. Some drivers report that this feature must be turned *on* for the best video. We suggest that you try both ways.

Some cameras are made to shut off automatically if there is too much vibration. If your camera is of this type and the situation proves unworkable, there is nothing that can be done. That particular camera cannot be used. Try renting the model camera that you are interested in before purchasing to assure that it will hold up under the rigorous abuse of the race car environment.