

“Beam not found”

Out of focus travel - It is possible for the focus to run into the focus end stop (most forward position) before it has achieved maximum focus. This can occur on larger screen monitors that have a pronounced amount of curvature. This can be manually verified by positioning the stage in the corner(s) of the monitor and testing the amount of forward travel before the motion stops. If this happens before focus is gained, then the monitor needs to be positioned closer to the camera. After initialization, (camera has been driven forward and returned) move the monitor closer another 1/2 inch or so. Be aware that the monitor must be moved back again before another initialization is performed. If you then determine an adequate working distance for the monitor, you can disable the focus forward" part of the initialization through the main setup variable ="System Init Functions".

Raster lost behind bezel - if the raster is sized slightly larger than the bezel, the beam will be lost along the edges and produce erroneous results. Visual inspection is the best way to check by displaying a grid or full screen pattern.

Signal level - low signal amplitude can also cause this type of problem, especially when running in the higher resolution modes. The size of the beam decreases as resolution increases and produces less information coming through the shadow ask. Make sure that the observed signal is about 50% FS before you run any tests.

Note - If the system has the Photopic filter installed, you may consider removing it (or using the alternate lens supplied that does not have one installed). This will increase signal amplitude and as an added advantage, allow the camera to get closer to the screen. Removing the photopic filter will also increase the sensitivity to blue which is a benefit in convergence measurements. The only reason to remain using the filter is make luminance measurements using the CCD camera. If your system is equipped with spectrometer than removing the filter shouldn't pose a luminance measurement problem.