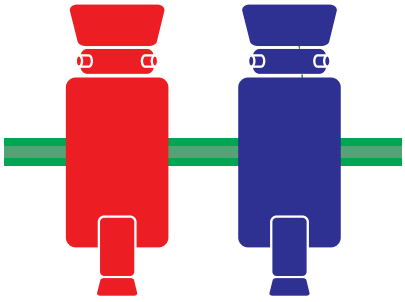
Playing with the 3D image

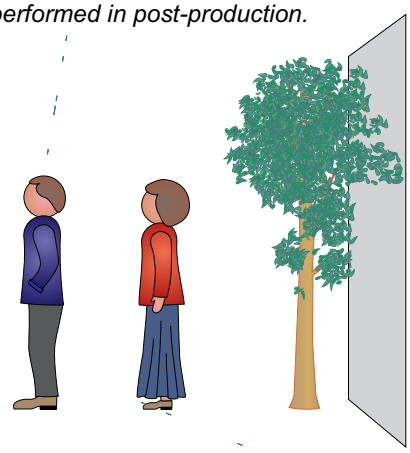
How to enhance a 3D shot

With the 2 cameras set up correctly, the 3D image can be modified to give the image more depth, or position it either nearer or further away.

With the image shown here, shot with two cameras there are two adjustments that can be made, the inter-axial distance, or toe-in angle.

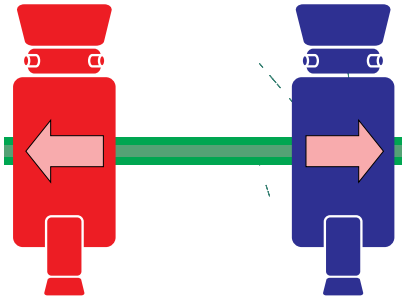
Note : Toe-in is performed on the camera rig and introduces keystone errors. Convergence is a planar move with no keystone errors. It cannot be performed in the camera rig and must be performed in post-production.

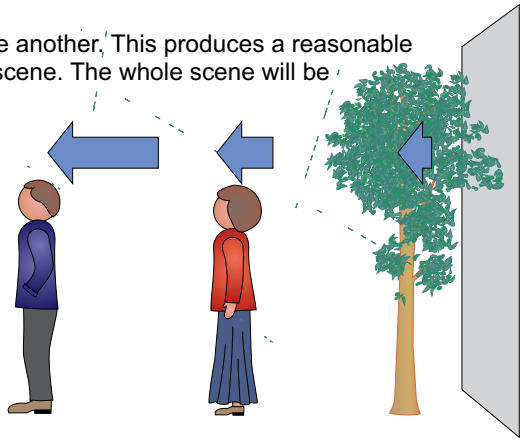




Standard 3D shot

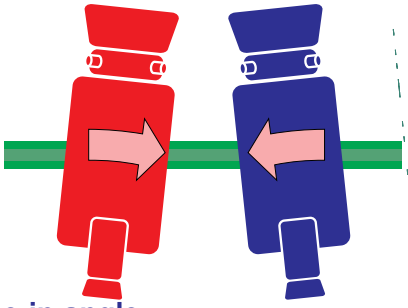
The cameras are placed a nominal 65mm apart, parallel to one another. This produces a reasonable 3D image, with a pleasing amount of perceived depth for this scene. The whole scene will be in front of the screen.

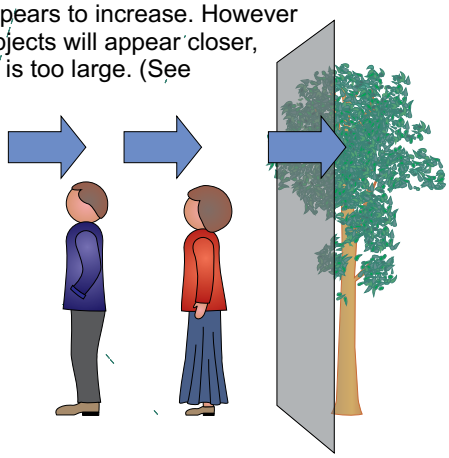




Increased inter-axial distance

When the distance between the two camera, commonly referred to as the inter-axial distance, is increased, the perceived depth increases and the distance between object in the scene appears to increase. However care should be taken not to increase the inter-axial distance too much. Close objects will appear closer, but will not grow any larger. The 3D illusion may break if the inter-axial distance is too large. (See **Depth Cues**.)





Altered toe-in angle

When the angle between the two camera is altered to point them slightly towards each other, commonly referred to as the toe-in angle, the perceived 3D image goes further into the distance, even though the various objects appear to be separated by the same distance. Care should be taken not to push the 3D scene back too far. Objects in the distance may force eyes to diverge which may cause eye strain. Excessive toe-in angles will also introduce keystone errors which will need to be corrected later. (See **Camera Rig Errors**.)