



THE RAINBOW EFFECT

Many of our audio-visual enquiries come from people who are concerned about the **Rainbow Effect**.

This visual effect occurs to less than one quarter of viewers. However, to those that are affected, it is a justifiable concern.

It occurs when the eye can detect Red, Green and Blue colour separation which can create a rainbow type display.

For those people who can detect it, it is far more problematic in home theatre display than it is in data display.

Due to the variation in technologies, the Rainbow Effect is not an issue in LCD projection. It can be in DLP projection. However, DLP remains the preferred technology in Home Theatre presentations.

A projected DLP image relies on a light source being reflected off a spinning colour wheel. For those that can see the Rainbow Effect, it typically occurs when the colour wheel spins too slowly.

The colour wheel is divided into R, G and B segments and its rotation speed is a measure of its refresh rate. For example; a 5 segment / 2 speed colour wheel is one where the R, G and B colours occur over 5 segments of the colour wheel and the wheel actually rotates at 2 revolutions per second.

There are 2 main reasons why the Rainbow Effect is not normally detected in data projection (both are related to eye movement):

1. The viewer does not normally sit as close in data presentations and as a result there is less side to side movement of the eye.
2. Data images tend to be static images so your eyes are not continually reacting to random movements, making it much harder to detect that Rainbow Effect.

If you find that you are one of the minority that can detect it, chances are you will find that it's not as bad as you thought.

Quality AV sells a range of DLP and LCD projectors.

We recommend you purchase from a demonstration and not from a brochure.

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