# Colour Removal 

## Can you make light disappear?



Notice the spectral colours on the back screen.
Put a colour filter between the light and the prism.
What colours are left in the spectrum?
What colour is on the right screen?

Every kind of light contains various spectral colours. The prism spreads them out. The white light that misses the prism shines on the front screen.

Each filter blocks or partially blocks some of these colours, e.g. a yellow filter blocks blue light. The prism spreads out the remaining colours, letting you see only the spectral colours that pass through the filter. The colour on the front screen shows you what these colours look like when they are mixed together.

The colours that you see will be the same whether you put the filter between the prism and the light source, between the prism and the screen, or between the screen and your eyes.

3D glasses, which have red and green coloured foils on one lens each, work according to the same principle. The corresponding 3D movie consists of two superimposed images, one in red and the other in green. When watching the movie through the 3D glasses, the red coloured foil lets only the red image through and the green coloured foil lets only the green image through. Thus, both eyes see different images, creating a 3D impression.

