

Seeing Depth from a Single LCD

SHARP

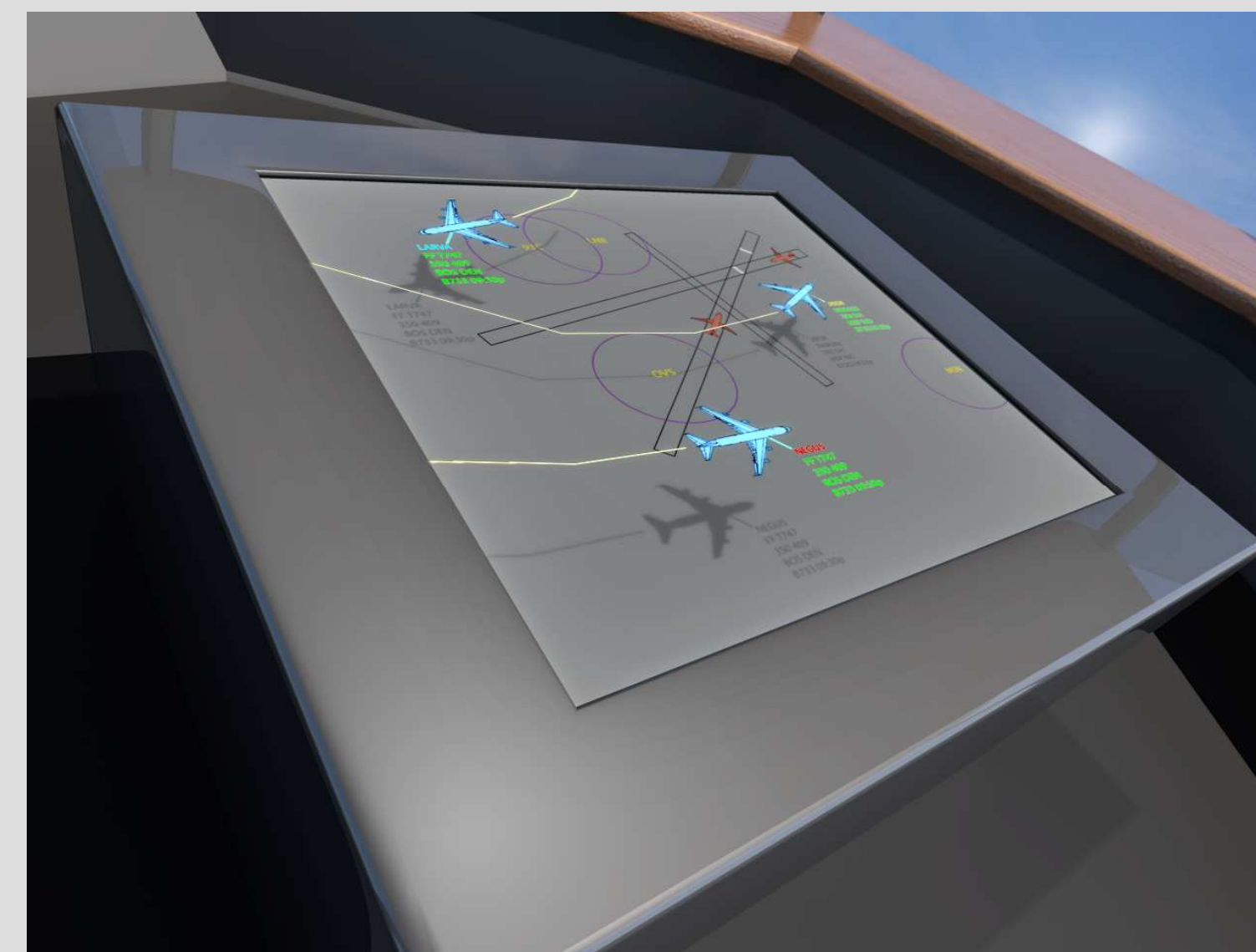
Sharp Laboratories of Europe Limited
Edmund Halley Road, Oxford Science Park, Oxford, OX4 4GB

Abstract

- A 'Dual-Depth' display has been developed
- Two distinct images can be seen from a single LCD
- Dual-Depth adds realism and interactivity to a display and can provide a competitive edge to many market areas
- A Dual-Depth display is demonstrated



Applications



Increased Impact

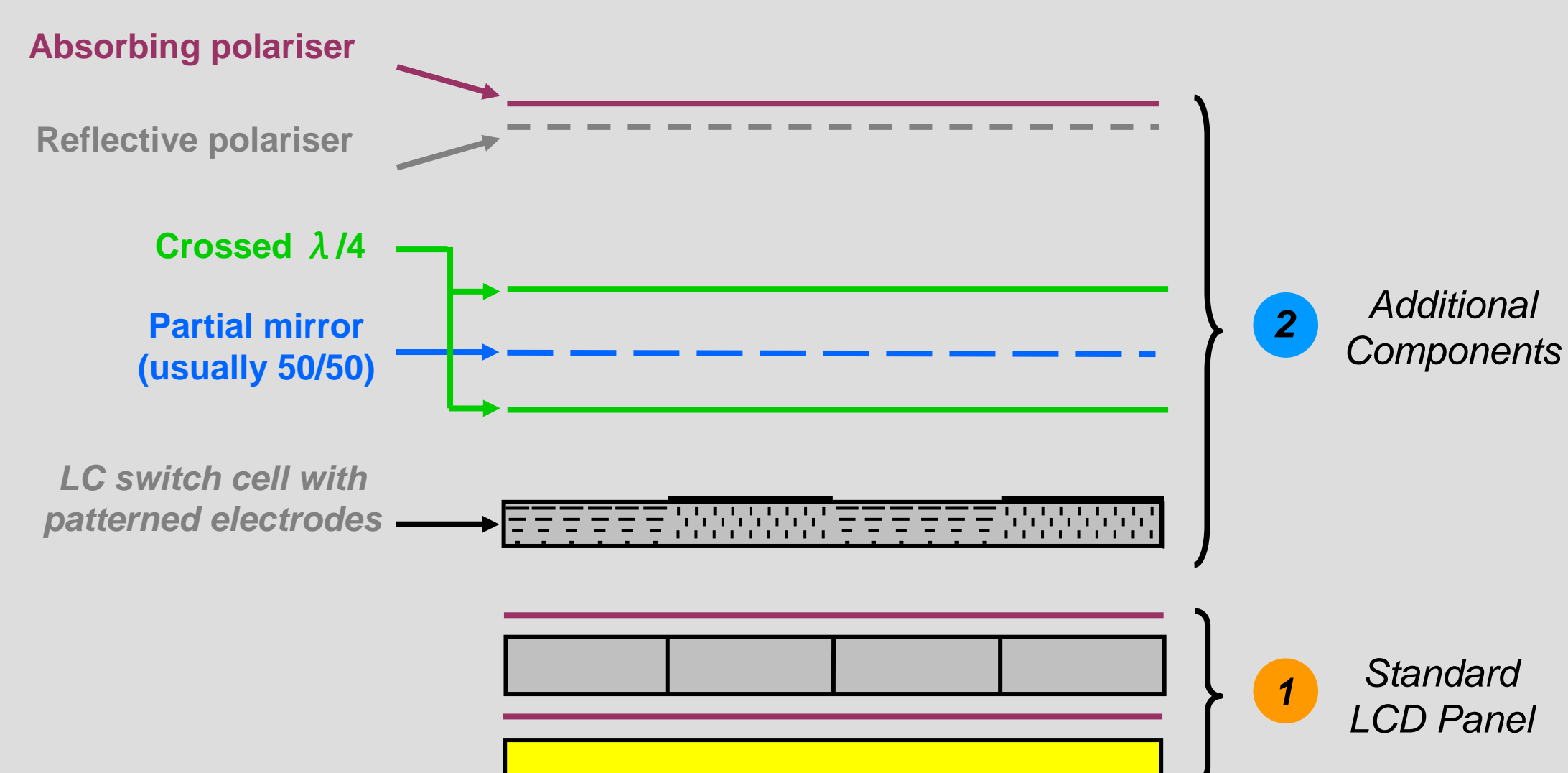


Increased Safety

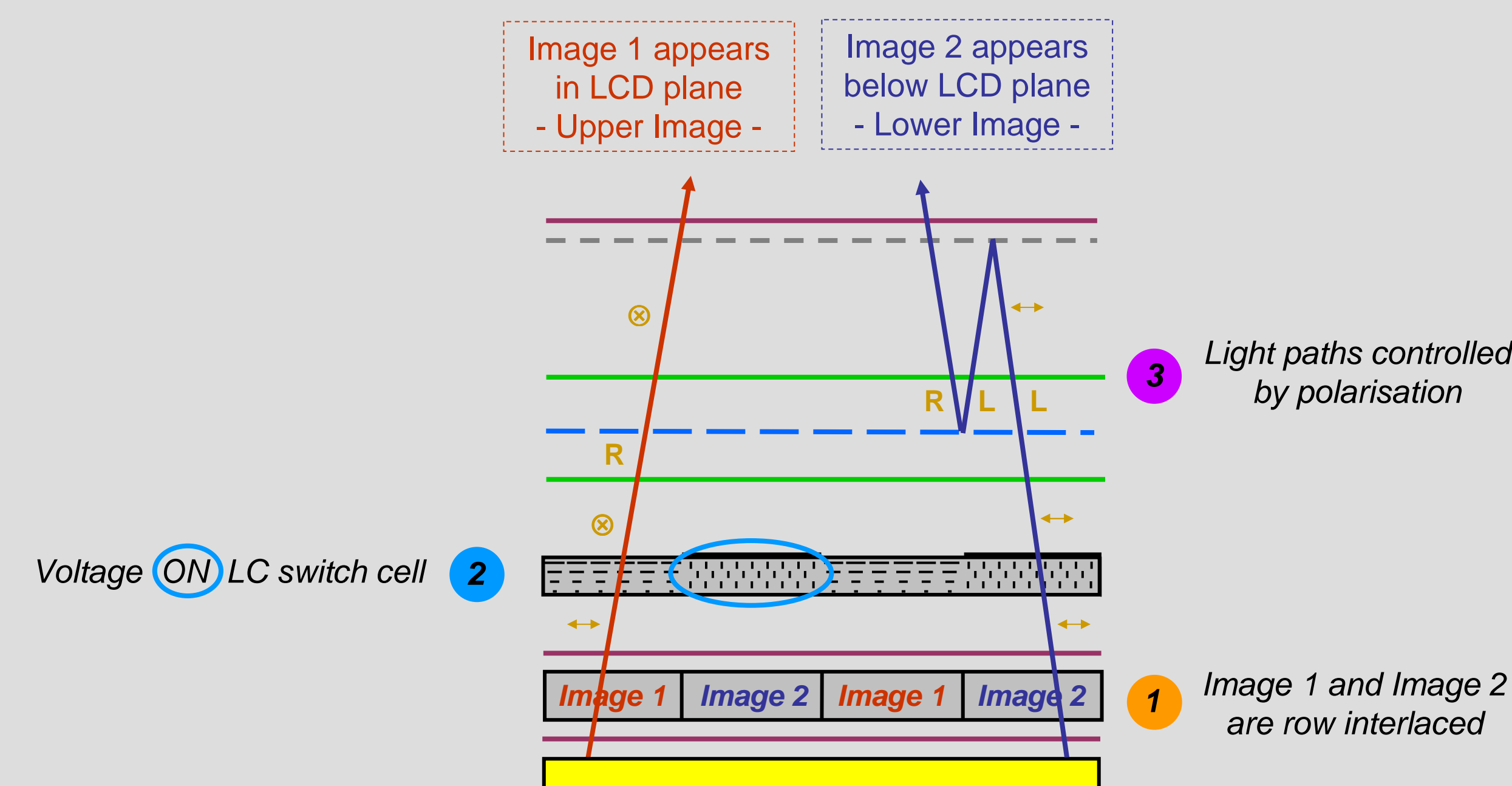


Increased Interactivity

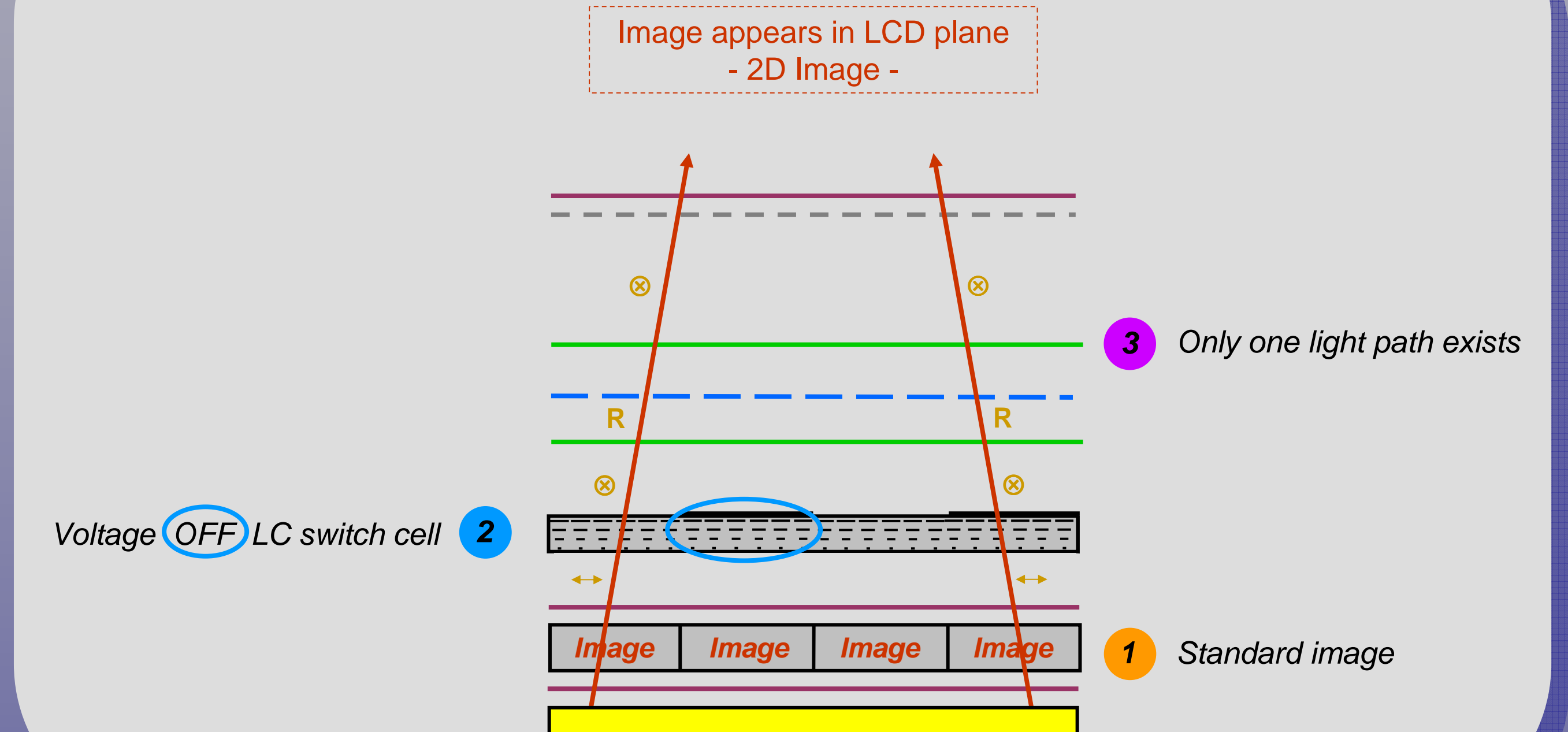
Construction



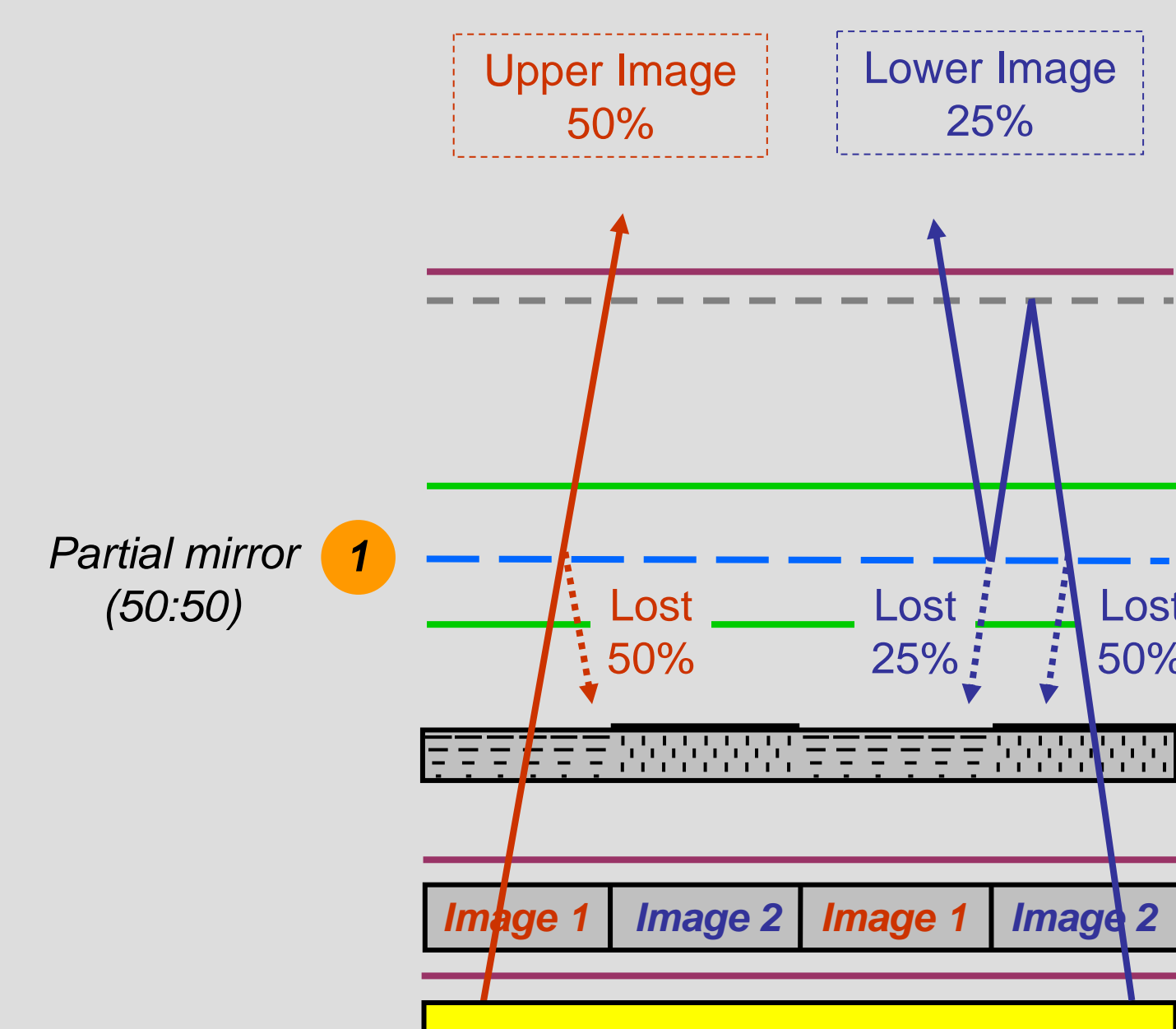
Operation: Dual-Depth Mode



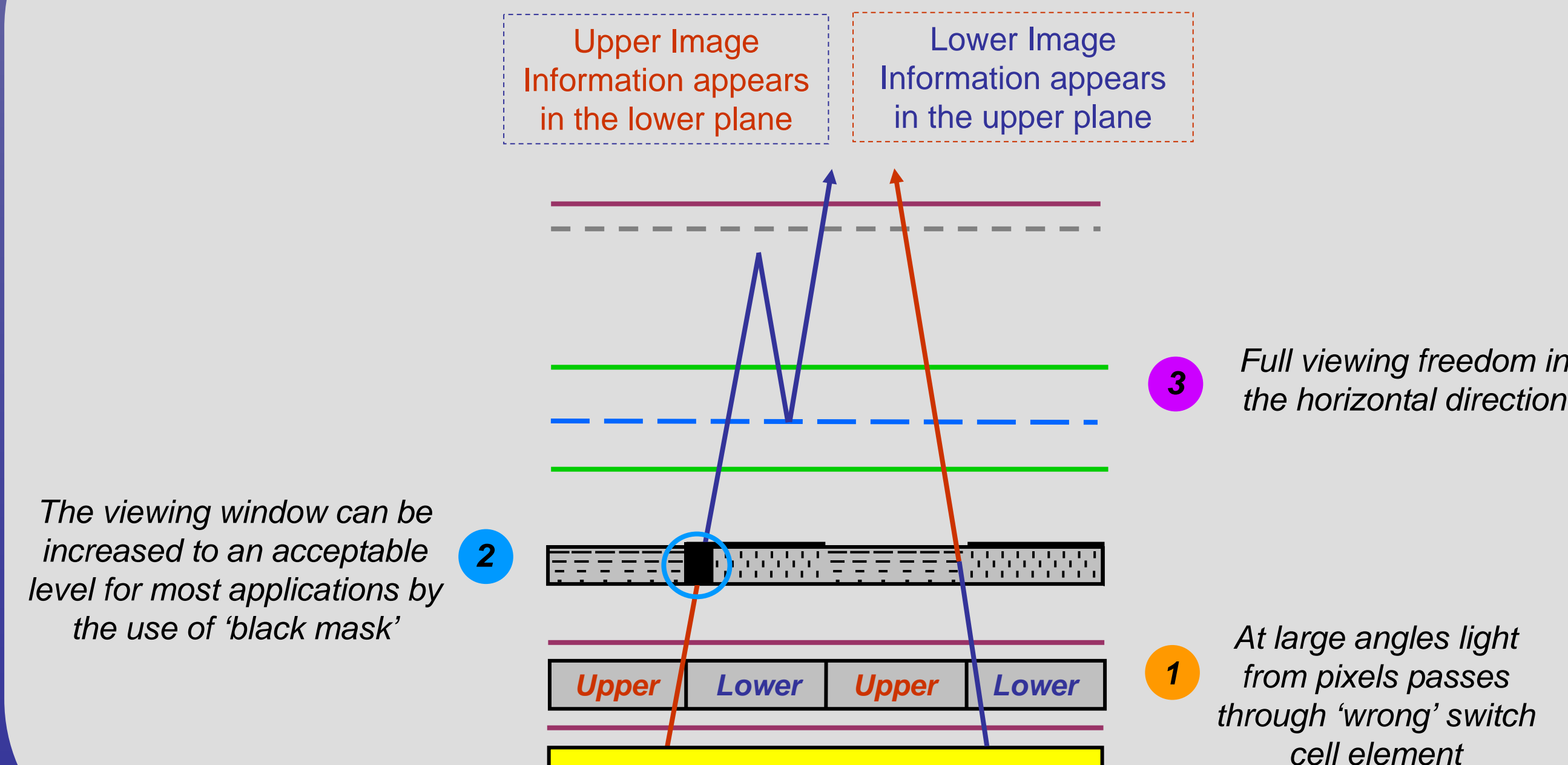
Operation: 2D Mode



Brightness



Vertical Viewing Window



Conclusions

- First display to be built which shows two independent images using only a single LCD as the image source
- This type of display allows for enhanced interactivity and increased realism
- This newly developed Dual-Depth display offers an alternative approach to multi-panel displays for showing depth
- This approach offers higher efficiency since it avoids the transmission losses associated with multiple panels and is likely to be cheaper