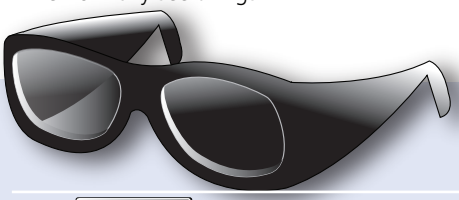
3D Television

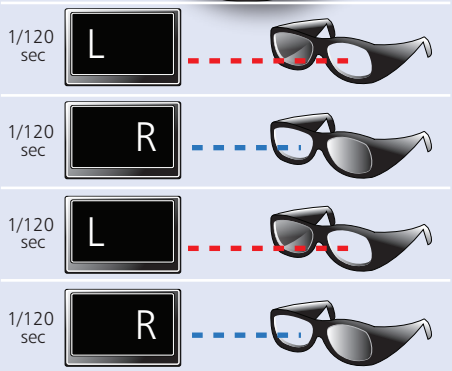
Bringing new depth to television

When we see things in real life, most of us get a sense of depth that is not there with TV today. The current technique for 3D TV is called stereoscopy; it brings back the depth by showing slightly different pictures to each eye. This is closer to how we normally see things.



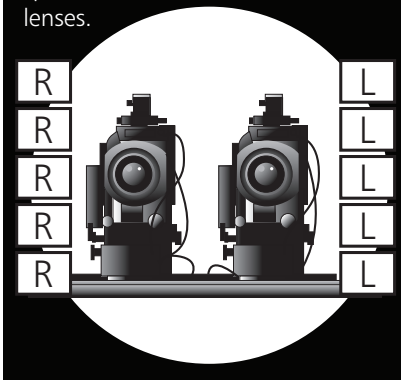
Each eye's picture appears on the 3D TV screen, one after the other. Images are sent to the eyes at a rate of around 50-60 images per second, making the process imperceptible to the viewer. Special glasses make sure each eye gets the intended picture.

Fantastic - now the picture has depth!



Not everyone can watch 3D TV comfortably. Those who experience discomfort should just watch in 2D.

3D TV programmes are shot using special cameras, which have two lenses.



Most TV programmes will continue to be broadcast in 2D, with 3D used for special 'prime content'. But for the moment, there are several different ways of sending the 3D TV over the air.

To ensure 3D TV sets made by different manufacturers will work anywhere in the world, so that consumers can buy with confidence, Geneva-based ITU brings specialists together to agree common global standards for 3D TV broadcasting. Future technical challenges for ITU experts include television with 16-32 times the definition of HDTV pictures ('UltraHDTV'), and more pictures per second so that movement is smoother and sharper.

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