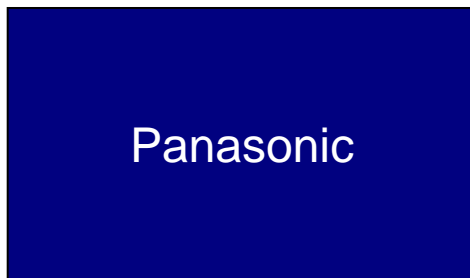


# What is Image Retention?

Plasma image retention is a phenomenon that can occur when a bright static image is left on the screen for a prolonged period. A darker after image remains on the screen even after the original image has gone. This occurs because the phosphor in the pixels becomes slightly darker than the other pixels next to the bright image (when driven hard for a prolonged period). Leaving the aspect set to 4:3 for prolonged periods can also cause permanent image retention as the image area ages whereas the black borders don't.

There are two types of image retention, temporary and permanent. Temporary image retention, as the name suggests, will disappear with normal use, viewing moving images over the following few hours of use. Permanent image retention is where the image remains as the pixels have "Aged" more than the pixels outside the original image.

Static high contrast image left on the screen for more than an hour



A slightly dark after image remains on the screen, visible when viewing light static backgrounds



## Tips for avoiding image retention

- Avoid displaying static images on the screen for periods over and hour.
- Use a screen saver when displaying images from a PC.
- When displaying a static presentation avoid using the same colour on the same part of the screen for each slide

- Do not leave the aspect set to 4:3 for prolonged periods on a regular basis
- Do not use High Contrast levels and Brightness levels when not necessary.
- Avoid games that leave a static image on the screen, especially those that have white or bright static icons.

Image retention will also occur on CRT screens in the same conditions in exactly the same way, but image retention on conventional CRT Televisions was seldom discussed.

Freeview broadcasters have reduced the intensity of on-screen channel logos to reduce the risk of image retention when the same channel is viewed for several hours.