

Ultra-High Definition (UHD) Television

Definition

4K means a clearer picture. It's more pixels (8,294,400 to be exact) on the screen at once that creates images that are crisper and capable of showing more details than standard HD.

Ultra-high-definition is now firmly established in screen and monitor definition. This refers to the measure of the horizontal number of pixels for the screen, so ultra-wide screens (2560 x 1080).

4K has nearly twice as many pixels horizontally, while maintaining aspect ratios. It is also possible to get an 8K screen and this is the up and coming technology in ultrahigh definition.

4K resolution is 3840 x 2160 or 2160p. To put that in perspective, a full HD 1080p image is only a 1920x1080 resolution. 4K screens have about 8 million pixels, which is around four times what your current 1080p set can display.

Do all those extra pixels matter?

They matter very much. More pixels mean more information. More information means sharper pictures. Sharper pictures are more engaging. More engaging content is more fun.

Issues currently with 4K and 8K display technologies:

- 4K and 8K definition is still expensive as they have not been adopted widely enough for consumers to benefit.
- The main issue with 4K and 8K is simply content. While films are able to be high resolution and many have been filmed in 4K for quite a while now, everyday television programmes and many video games are often not made at such a high resolution.
- Users therefore do not buy 4K and 8K devices because there is not enough content and creators of television programmes do not create 4K and 8K programmes as it would prove very expensive and not many consumers can currently view them.
- It is also very difficult to stream content that is ultra-high-definition because of the amount of bandwidth required. Many people stream their movies and television programmes from online providers and this is a further barrier to the regular use of ultra-high-definition.