

Determining Display Size

Determining a display always starts with how far away the seating position will be from the display. The further away you sit, the larger the display needs to be so the text, images, and motion can be viewed without causing eye strain. A general rule of thumb is to take the distance from the display location (in inches) and divide by 1.6. The resulting number is the display diagonal in inches required to meet a median display size. This is not a rule.

In reality, there are no set-in-stone rules to determining the display size, unless you are actively trying to achieve a size based on recommendations from THX. The formula used by THX is the distance from the display to the seating area (in inches) multiplied by 0.835. The resulting number again would be the displays diagonal size.

The THX recommendation is great for setting up a dedicated theater but not always practical when placing a display in a living room or bedroom. A successful display size in most locations throughout the home should be chosen by the first method mentioned above. If a display is chosen that is smaller than what is required by the first method, the risk of eye strain increases.

What is 4K?

All displays are made with pixels. Pixels are a group of tiny lights that illuminate to create an image. A single pixel is made up of a red, green, and blue light. The number of pixels in a row and a column are what create a "resolution" for that display. While there are many resolutions, the most common resolution today is commonly called 4K or UHD (Ultra High Definition).

A resolution of 4K/UHD is made up of 3,840 pixels across the display by 2,160 pixels high. No matter the diagonal of the display, this number of pixels will remain the same. In total 8,294,400 are required to achieve a 4K/UHD image on a display. This makes pixels extremely tiny. So tiny that even standing up close to a display will not reveal a single pixel.

Display Summary

Custom Audio Video

48 Pennington Dr

Bluffton, SC 29910

(843) 815-5130