

Guide to Widescreen Notebook Displays

The earliest instance of the widescreen display being installed inside a notebook computer can be traced back to the Sony C1 which displayed a resolution of just 800 x 480. Widescreens made their official entrance in PC notebooks in 2003, although Apple preceded this by offering the 15" widescreen Power Mac. In 2005, the popularity of widescreen notebooks reached a new high with the unveiling of the Thinkpad widescreen Z60 series notebooks.



Sony's pioneering widescreen VAIO C1 notebook

The question is: Is the widescreen format for everybody? A big part of the answer will depend on what a widescreen notebook or monitor is used to do. Here are some considerations that might help with your decision:

1. Widescreen Notebooks

The length and width of a widescreen notebook's screen set it apart from the standard notebook. The average notebook uses an aspect ratio of 4:3 and a resolution of 1024 x 768 pixels. The widescreen notebook breaks with tradition and increases screen size 25% lengthwise for proportions equal to that of the cinema screen or a widescreen LCD TV.



Widescreen Acer Ferrari 4000

2. Widescreen Display Sizes

The Sony C1 may have started it all, but it is by now considered only as a small-sized widescreen notebook, which is anything below 12.1". Currently on offer are 8.9", 10.6", 11.1", 12.1", 13.3", 14", 15.4", and 17" display sizes, with 19" products reportedly in the pipeline.

3. Widescreen Resolutions and their Corresponding Aspect Ratios

Here are the common resolutions found in widescreen displays:

800 x 480

Representing an aspect ratio of 10:6, it was seen first in the Sony C1 notebook computer. Although this resolution is very low by today's standards, it was still quite acceptable compared to the 800 x 600 (4:3) resolutions of the time. Although the C1's screen measured only 8.9", it came as a part of the C1's delightfully tight packaging and superb portability. Currently, displays of this resolution are rarely available.

1024 x 600

Also having an aspect ratio of 10:6, it is meant to challenge the mainstream screen with 1024 x 768 resolution.

1280 x 768 & 1280 x 800

The 1280 x 768 resolution representing an aspect ratio of 16:9.5 and the 1280 x 800 resolution representing 16:10 respectively; these are the two most common resolutions used in contemporary 10.6", 12.1", 13.3", 14", 15.4" widescreen displays and can be considered entry-level for widescreen notebook computers. They provide about a 25% increase in onscreen content compared to screens displaying resolutions of 1024 x 768.

1280 x 854

This resolution (16:10.5) was used first in the 15.4" Power Mac notebook computer and adopted later by a limited number of other PC notebooks (mostly sized 15"4"). This resolution has fallen out of favor in recent times.

1366 x 768

This resolution provides a perfect 16:9 aspect ratio and a perfect home for DVD movies and no more annoying black bands above and below the picture. It is currently available in the 11.1" VAIO Type TX widescreen notebook.

1440 x 900

This resolution (16:10) is found in 17" notebooks only, and is positioned as entry level in 17" widescreen notebooks.

1680 x 1050

This is currently the mainstream resolution (also 16:10) for 17" widescreen notebook computer displays. Users will experience a 35% increase in onscreen content compared to the normal 17" screen displaying a resolution of 1280 x 1024.

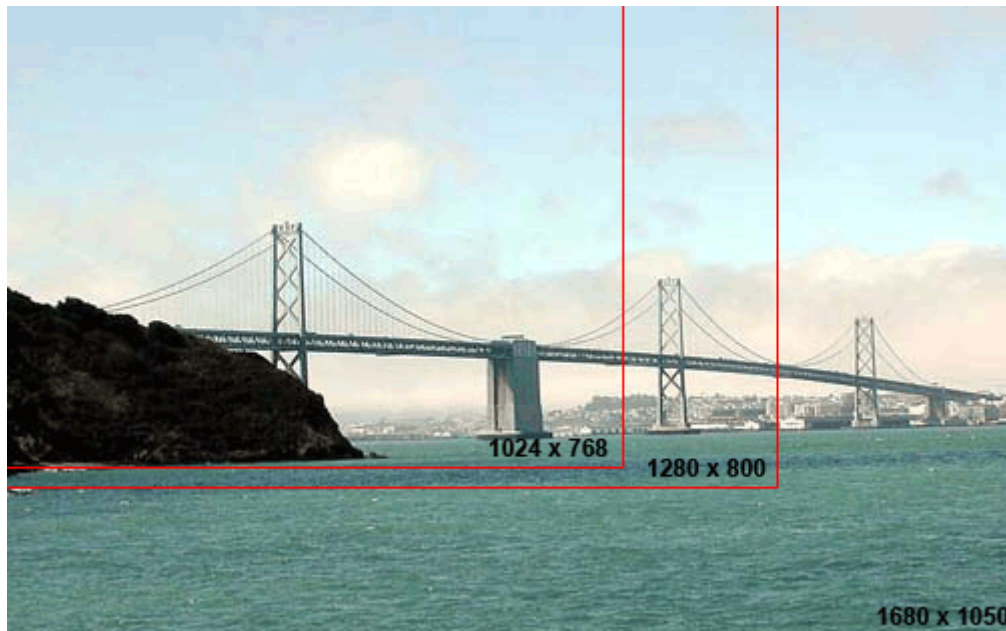
1920 x 1200

This is the pinnacle for current 17" widescreen notebook displays, and provides a 75% increase in onscreen content when compared to a normal 17" screen of 1280 x 1024 resolution. The resolution is a perfect fit for 1080p and 1080i (1920 x 1080 16:9) HDTV.

4. Benefits of the Widescreen

When used for entertainment, a widescreen display is in its element when showing widescreen DVD movies in their intended 16:9 aspect ratio. This means a bigger picture more comfort and less wasted space (less or no black bands on either side of the picture).

The widescreen display also makes it easier to edit and view panoramic images and may eliminate troublesome horizontal scrolling altogether. When editing images of normal 4:3 aspect ratio, you can simply place your GUI tools/utilities to the unused spaces on either side of an image. In any case, a widescreen display can help you increase work (and play) efficiency.



Comparison of different resolutions

Another benefit of the widescreen display is evident when it comes to serious work – the ability to display two windows side by side and to drag and drop (or copy n' paste) data without having to switch between them is priceless.

5. Is the Widescreen Display Perfect?

We've covered a lot of the widescreen display's positive points, but that doesn't mean that there are no drawbacks. Here are some of them:

- a. The first and most obvious drawback is price, with the widescreen display being quite a bit pricier than the corresponding 4:3 display. This is also the reason why widescreen displays are so ubiquitously absent at the entry level price points, though the gap is getting closer.
- b. The next problem is an issue of mobility, although this really points to notebook sizes 15" and above. It does depend, however, on the design philosophy of the manufacturer - some use the desktop replacement mentality and cause their products to be quite large in size and therefore heavier as well.
- c. Compatibility with applications - especially games - may be an issue as many

games are programmed to be displayed in 4:3 aspect ratio. Depending on your settings, you will experience black bands to the sides of the image, or you may try and stretch the image, which will look uncomfortable in any case. Certainly more and more, if not all, games today are compatible with widescreen display.