Things you should know about LCD Monitor

The three most exciting advantages for LCD monitor types with CRT monitors are the ability to save space, consume less power and flicker-free features.

LCD (Liquid-crystal display), previously used only for limited notebooks, but now this model has been used a lot for desktop computers. The three most interesting advantages for this type of screen compared to CRT (Cathode Ray Tube) is the ability to save space on the desk (especially with 17 'or larger screens), consumption less power and flicker-free feature (reduce flickering and increase image quality). In this tutorial, we will introduce you to the issues you need to get the right choice when buying a new LCD monitor.

LCD screen in laptop computers

The most important thing you need to know about LCD technology is LCD panels with fixed resolution. This resolution is called 'native resolution', 'maximum resolution' or simply 'resolution' and you have to configure your desktop to match that resolution, otherwise the following three issues can happen, Depends on your monitor

model:

1. Images will not be clear; It will be blurred. You will see a lot of areas that are not clear.

2. The screen will focus the image to a new resolution, reduce the image size and insert a black frame around. For example, if the original LCD resolution is 1280x960 and you have dropped it to 800x600, this means losing 480 pixels (1280 - 800) horizontally and 360 pixels (960 - 600) vertically. The image will be focused and there will be 240 pixels above and below with 180 pixels on both sides being black.

3. The screen will stretch the image to not display the surrounding black area, fill the entire screen. This is done through a technology called interpolation, but not 100% perfect and so you will feel that the image is of better quality (clarity), when the screen configured in native resolution on screen components (icons or letters, etc.) will be smaller. In general, you will feel the image is blurry when the screen is not configured according to its original resolution.

Due to the inherent characteristics of LCD panels, you must choose an LCD monitor that is right for you. High resolution is not necessarily a good way. With high resolutions, you will have more space on your screen (in other words, you can let multiple things appear simultaneously on the screen), however icons and characters will be smaller. For average users, a high-resolution screen doesn't always translate a better product, it will largely depend on the application. If you only use your computer to browse the Internet, write emails, use spreadsheets and words, you can just go to a small screen with a high resolution, they will be cheaper and will not shrink the expressions. statues and characters. However, if you run professional applications like video and photo editing programs, you should use a screen with high resolution and large size.

LCD screen for desktop computers

If you are a gamer, buy a screen that matches the resolution of the game you want to play, otherwise the game will look blurry. In other words, configure your game to run in the largest resolution mode (original). All gamers know that when you increase the resolution, the performance will be lower (since there will be more pixels on the screen). If your game runs too slowly, it means that it is time you need to upgrade your graphics card (video). It is also possible to reduce the resolution of the game, but as we explained, you will deteriorate the quality of the image.

Screen size and aspect ratio

Screen size is measured in inches - does not affect resolution. That means a big screen doesn't guarantee a high resolution. In fact, large LCD screens often go with lower resolutions than small screens. If you see a big screen sold for less than a small screen, you can bet that the small screen will have a higher resolution. However this does not mean that the small screen is better than the big screen; This issue completely depends on the application. Those who want more screen space (for photo and video editing) will enjoy a high-resolution screen (even small size), while ordinary users prefer screens. Large but low resolution, low resolution at this time will keep the icons big size.

You should consider the problem of increasing the size of icons and characters in Windows Control Panel.

The aspect ratio is the ratio between the horizontal and vertical screen. CRT monitors and original LCD screens usually have a 4: 3 aspect ratio, meaning that the length of the horizontal is 4: 3 times the vertical. The ratios commonly used today and still called 'widescreen' are 16:9 or 16:10.

The table below lists the aspect ratios and resolutions for those aspect ratios. Monitors with different aspect ratios can achieve resolution from other aspect ratios by adapting them.

Ratio

General resolution

4: 3 (1.33)

640 x 480
800 x 600
1024 x 768
1280 x 960
1600 x 1200
1920 x 1440
2048 x 1536

5: 4 (1.25)

1280 x 1024

15: 9, 5: 3 (1.66)

1280 x 768

16:9 (1.77)

1280 x 720
1920 x 1080

16:10 (1.60)

960 x 600
1280 x 800
1440 x 900
1680 x 1050
1920 x 1200
2560 x 1600