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~ Digital Cameras

# ReadyNetGo ... News

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## TIP(s) OF THE MONTH

### Problems with flicker?

Flicker on your CRT monitor occurs primarily due to low refresh rates. To help ease the strain on your eyes, try increasing the refresh rate to 75Hz or above. Make sure to check your owner's manual for the preferred resolution and corresponding refresh rate as most CRT monitors have optimal levels that should not be exceeded.

If increasing the refresh rate doesn't solve the problem, try upgrading the video card or downloading new monitor drivers.

### Wavy screens or distortions?

If your monitor is located next to another monitor or is close to fluorescent lights, the display may experience a rippling or wavy effect. To correct this, try moving your monitor away from other sources of interference.

### Should I turn off my monitor?

**YES**, and here's why ...

Leaving your monitor on 24 hrs/day will shorten its lifespan; it wastes energy; and could pose a potential hazard if the monitor fails suddenly and no one is around. Even if you step away from your desk for a couple of hours during the day, turn off your monitor and you will save a great deal on energy costs over time and prolong your monitor's life in the process.

## LCD Monitors: Worth A Look

Have you ever wished for more desk space? Chances are that if you have a 17", 19", or especially a 21" CRT monitor, you've been frustrated with your monitor's footprint.

**Well fret no more!** With the drop in price of LCD monitors, you can reclaim your desk space once and for all and not spend a fortune to do so. Take a look at the differences between these two monitors and your next purchase may just be an LCD.

### Primary Differences

There are many differences between CRTs and LCDs but probably the biggest difference is **size**. Whereas a typical 17" CRT monitor is 15-18" deep, a typical 17" LCD is only 7-10" deep. You will actually be able to see your desk! (LCDs can also be mounted to the wall greatly increasing their appeal.)

LCD monitors **weigh** between 10 - 18 lbs. while CRTs can range anywhere from 30 - 45 lbs.

**Power consumption** is another huge difference. LCDs will use 30-40 watts of power while CRTs use between 90-120 watts.

When comparing these monitors, keep in mind that the **viewable area** of a 17" CRT is different from a 17" LCD. A 17" CRT monitor has an actual viewable area of 15.5" to 16" with at least a 1" case border. When you look at a 17" LCD, the screen is truly 17" from corner to corner.

Keep in mind that if you currently have a 17" CRT, a 15" LCD would be the comparable choice since both of these monitors work best at a resolution of 1024x768.

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## WWW (Websites Worth Watching)

1. [www.howstuffworks.com](http://www.howstuffworks.com) - Informative site offering tutorials and general info on a wide range of topics. **Excellent!**
2. [www.tvstats.com](http://www.tvstats.com) - Need access to weather, traffic or the latest news in a particular area? Go to the home page and click on **Stations** for access to individual TV channels.
3. [www.time.gov](http://www.time.gov) - Website for the official U.S. time.
4. [www.funbrain.com](http://www.funbrain.com) - Fun quizzes and games for learning math, reading and more.

### Analog versus Digital

One of the disadvantages of CRTs is that they are **analog only** (VGA), which causes a decrease in performance because signals must transfer from digital (graphics card) to analog (monitor). Some LCD monitors address this with an optional **DVI** (Digital Video Interface) port, which eliminates the digital to analog conversion and generally boosts image quality. If you attach your LCD monitor via the analog port, you may notice some interference especially if you are accustomed to a digital laptop screen. If you won't be watching a lot of DVD movies on your LCD, you can save some money (using a DVI cable requires a DVI compatible graphics card which costs between \$150-\$300) and get good functionality by using your analog connection. Just make sure you have adequate RAM and a good graphics card installed.

### Advantages of CRT Monitors

While LCDs are an excellent option for most users, certain applications are still well suited for CRT displays. Overall, since CRT monitors can display a wider range of colors and can operate in multiple resolutions effectively, CRTs are still the choice for high-end graphics, games, and video (especially if you like to watch movies on DVD). So if these activities are important to you, stick with your CRT.

### Basic Specifications and Recommendations for LCD Monitors

When researching LCDs, look for the following variables:

**Brightness (luminance)** – Important specification for optimal viewing; measured in  $\text{cd/m}^2$  or candelas per square meter. Look for a value of at least  $250 \text{ cd/m}^2$ .

**Contrast Ratio** - Indicates the difference between the lightest and darkest sections of an image. The greater the contrast between light and dark colors, the better the image. Look for a contrast ratio of 300:1 or higher.

**Pivot function** – Some LCD monitors have a pivot function that allows you to manually change your screen from portrait mode to landscape mode. Good feature for spreadsheets!

**Resolution** – Refers to the number of pixels that can be activated at the same time. Users of CRT monitors can adjust the resolution and refresh rate to their individual taste. Generally, the higher the resolution, the more you can see on your screen (icons are smaller). LCDs, on the other hand, operate best in only one *native* resolution. For a 15" LCD, the setting is 1024x768. For a 17" LCD, the setting is 1280x1024.

**Response time** – Response time is similar to the CRTs response time. This spec will tell you how fast the images move on the screen especially when scrolling or watching video. **Faster is better**; look for a response time between 20 - 35 ms. (A typical CRT response time is between 8-12 ms.)

**Viewing Angle** – Specifies the furthest angle that you can view the screen without losing image quality. Most manufacturers list a horizontal and vertical angle in the range of 90 – 170°. If the screen will be used for training or group use, get an LCD with a wide viewing angle. If you are the sole user and sit directly in front, you can look for viewing angles on the lower end.

**Advantages** – Say goodbye to flicker problems and say hello to your desk. Option for a DVI (Digital Video Input) cable which boosts image quality. The best applications for LCD monitors are text based office applications, internet browsing, email and low to medium graphics applications.

**Disadvantages** – Possibility of dead pixels which may decrease viewing experience; LCDs cost more than CRTs; they operate in only one native resolution which limits options for some applications; and the real clincher: you'll have to do more work to fill up your reclaimed desk space!