

READY NET GO ... NEWS

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<http://www.readynetgo.net>

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Tips of the Month

Laptop Batteries – Should you discharge completely then recharge?

Depends on which type of battery you own. Lithium ion (**Li-ion**) batteries **DO NOT** need to be discharged fully before they are recharged while Nickel Cadmium (**NiCad**) and Nickel Metal Hydride (**NiMH**) batteries **SHOULD** be discharged fully before recharging. Most recent laptops ship with Li-ion batteries but check your specifications to verify.

Keep in mind that a **laptop battery** will only last about **2 years** (depending on your usage). If you're shopping for a new battery, check with the manufacturer to see if they produce a Li-ion battery for your laptop. Li-ion batteries hold more energy and can hold their energy for longer periods of time compared to NiCad and NiMH rechargeable batteries.

Hardware Problems? Try this ...

No one likes it when their computer, modem or hardware device stops working.

Stay one step ahead and print out troubleshooting instructions from the manufacturer's website when everything is working perfectly. When your devices don't behave, you'll have troubleshooting steps ready.

This works especially well for link lights illuminated or sounds heard on many devices. Figuring out what the error means brings you one step closer to solving the issue.

Wireless Broadband – Is it Right for You?

It used to be that wired connections were the only secure and fast way to get online. Well times have changed and now **wireless broadband** is not only more secure than it once was but it is also much faster making wireless broadband an excellent option for mobile users.

Types of Wireless Broadband

- 1) **3G** – Works in a Wide Area Network (WAN) environment with much greater range than Wi-Fi. Multiple types include: UMTS, HSDPA, HSPA, and EV-DO (Rev 0/Rev A). 3G speeds support up to 400-700 kbps (and higher). Speeds will vary depending on where you are physically located. Used predominantly in the mobile phone market, carriers have expanded into providing PC cards for laptops and other mobile devices. **UMTS/HSPA** is used on the GSM network (AT&T, T-Mobile) while **EV-DO** is used on the CDMA network (Verizon, Sprint).
- 2) **Wi-Fi** – works only in a Local Area Network (LAN) environment with limited range (100-300 feet). Useful for small office/home office applications or for getting online in café's, airports, or other public places. 4 identities: 802.11b, 802.11g, 802.11a, and 802.11n (the latest). Wi-Fi speeds work between 11-300 Mbps and operate in 2.4GHz (b, g, n) or 5 GHz (a, n) frequencies.
- 3) **WiMAX** – 2 types: 802.16d (fixed) and 802.16e (mobile). WiMAX speeds work between 384 kbps to 7.2 Mbps. Designed for long distance wireless connectivity. WiMAX is still in the early stages for broadband access.

WWW (Websites Worth Watching)

1. www.paenergyfest.com – PA Renewable Energy Festival, September 22-23, 2007 in Kempton, PA.
3rd annual festival features workshops and lectures on renewable energy and sustainable living practices. Hands-on demonstrations, over 100 exhibitors, vendors, entertainment and food will be available.
WIN A 2007 TOYOTA PRIUS (HYBRID) – go to: <http://www.paenergyfest.com/prius.shtml>

Wi-Fi is the well known method of getting online wirelessly. Although Wi-Fi is an important tool, it has limitations (e.g., spotty service, pay restrictions, dropped signals) that have left many people wanting more.

In comes **3G wireless broadband** – a service provided by the major cellular carriers for broadband Internet access. The major difference between Wi-Fi and 3G is the scope of coverage. Wi-Fi is limited in range while 3G is not – wherever your cellular carrier provides service, you can get and stay connected. Speed is also faster on 3G networks (depending on location) making it an important tool for business activities.

WiMAX is a new technology that integrates the best features of Wi-Fi and 3G (ease of use and lower cost of Wi-Fi / coverage and roaming capacity of 3G). Since the technology is new, we'll focus on 3G for this newsletter but look for WiMAX products (and our review) in 2008.

Benefits of 3G Networks

If you're frustrated with locating Wi-Fi hotspots or with the range and speed of your Wi-Fi connection, a **subscription service** may be just the ticket to ease your worries. Wireless broadband cards enable laptop and mobile device users to use the same network as cell phone users.

So if you are accustomed to checking your email or browsing the web from your cell phone or PDA, you can now tote your laptop around and get high-speed online access with greater functionality.

As with cell phones, the more populated areas in general, will have the best connections. The further you are from a cell phone tower, connection speeds will drop down considerably. To get connected, the only hardware device you need is a PC Card, Express Card, or cell phone with a data plan and you can connect anywhere your carrier provides service (even internationally in some cases). No more searching for hotspots or hoping the guy next to you has an open (unsecured) wireless connection.

Getting online is simple: Purchase a PC or Express card modem and plug it into your PC/Express slot of your laptop (if your laptop doesn't already have a built-in broadband wireless card) and purchase a data plan from a cellular service company such as Verizon or AT&T (data plans may be less expensive if you already have a cell phone contract with the company).



3G Router from Top Global

3G Mobile Routers

One of the newer features of 3G technology is that you are able to share your cellular data plan with multiple computers by using a 3G router. Similar to a wired network router, you simply attach an Internet PC Card and you'll be able to share your broadband connection.

When choosing a 3G router (also called a cellular router or mobile router), it's crucial that you get one that is compatible with your PC Card or Express Card. Because broadband access is carrier dependent, certain products will only work with certain devices. For the most up-to-date information, manufacturers will list compatible networking products on their website or give us a call if you need help with configuring your new wireless broadband network.