

IN THIS ISSUE:

~ Power Protection

COMING NEXT MONTH:

~ MS Outlook & Exchange

READY NET GO ... NEWS

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Tip of the Month

Surge Arrestors

If you are in an area that experiences surges and spikes on a regular basis or if you want added protection, consider purchasing a “**surge arrestor**”. Also called a “whole house surge protector”, a surge arrestor is attached directly to the circuit breaker of your home or building. As a first line of defense, a surge arrestor stops the dangerous electric current from traveling throughout the structure.

Looking for ways to save money?

Studies have shown that many devices consume energy even if they are off so get into the practice of either **unplugging devices** from the wall outlet or **turning off** the surge protector.

For example, a TV turned off still consumes **2-11 watts** (depending on size and energy efficiency rating).

If you attach the TV to a surge protector and turn the surge protector off, you will potentially **save** between **\$2 and \$11 per year**. Add this amount to all of your other devices in your home or office and you can see the savings.

Note: Turning off surge protectors will not prevent damage if lightning strikes and enters the building through the wires. The only way to prevent damage to your equipment is to physically unplug the device from the wall outlet.

Protect Your Computer

Summer's almost here and many people are getting nervous again ...

They remember two years ago when a blackout hit the East Coast unexpectedly shutting off power to millions. If you were lucky, you weren't working on your computer or at least had saved any files you were working on. For others, they suffered losses that they still cringe at today.

One of the **best preventive measures** you can take regarding your hardware (including telephones) is **protection from power surges and spikes**. Although they occur infrequently, if a power surge or spike happens at the wrong time, it can be as gut wrenching as the “blue screen of death” on Windows 98 machines.

Difference between Surges & Spikes

A **surge** occurs when the voltage to a device is increased beyond normal limits for 3 nanoseconds or longer. A **spike** occurs when the voltage is increased for 1 – 2 nanoseconds. Both surges and spikes can do damage to your electronic devices. Since they are unpredictable events, they warrant preventive action.

Options for Protection

There are two ways to protect your equipment: **UPS's**, which extend the time you have to shut down your computer safely, and **surge protectors**, which allow you to attach multiple devices to one electrical outlet and provide protection against surges and spikes.

WWW (Websites Worth Watching)

1. www.energystar.gov – Site provides tips on energy efficiency from buying appliances to remodeling your home. Take the Home Energy Analysis survey to see where your energy (and money) is going!
2. www.eere.energy.gov/consumerinfo/energy_savers/ – Excellent site for info on conserving energy – Check out the chart on how much electricity appliances use.

1) Uninterruptible Power Supply systems (UPS's) are the best way to extend the time you have to save files on your computer during a power outage. UPS's convert AC power into DC power and store this energy in a battery. When attached to your equipment, they provide power for a particular amount of time; the larger the unit, the more energy is stored allowing you longer times to turn off equipment. Small units may give you 5 minutes of runtime while large units can extend your shutdown time to many hours. An added bonus: UPS's also act to stabilize the current that flows to your PC and peripherals.

So how do you choose which UPS to get?

- 1) Choose the correct size unit. Tally up the total watts of your devices that will be attached to the UPS. Make sure to get a unit that will comfortably run all of your hardware. **NOTE:** Printers, specifically laser printers, consume too much energy and should not be connected to a UPS. Normally, you will only need to hook up your CPU and monitor. If you need internet access, you will also need to hook up your modem, router, switch, etc.
- 2) Compare warranties of manufacturers. Some offer full replacement for devices that were attached to their UPS's but still suffered losses. Others have limited warranties. Like any insurance policy, choose the plan that you can live with.
- 3) Decide how long you want the UPS to operate. Operation times vary widely amongst units. Keep in mind: the larger the battery, the longer time it will run, but the expense is much greater. You'll have to weigh the pros and cons based on your usage, the applications you need to support, and your anxiety level!

2) Surge Protectors come in many types and styles. Some are equipped to provide additional outlets without extra protection (basic extension cord) while others have robust surge protection. Surge protectors have a grounding wire that diverts the excess current away from the electric cables connected to your devices and reroutes it through the grounding wire in the wall outlet sending the current back to earth. A surge protector is a necessity for all equipment connected to a wall outlet.

a) Cable surge protectors provide additional protection over the cable lines coming into your business or home. Hook up your TV and cable modem to protect against any unforeseen surges.

b) Telephone/Network surge protectors are another basic piece of equipment that all businesses and homeowners should use. If you've ever had a phone go dead during a lightning storm, you know how it feels to be cut off from the outside world. By installing a surge protector on your phone(s)/ network cards, you will prevent low to moderate power spikes or surges from damaging your equipment. **Note:** Many surge protectors have telephone/network surge protection built-in.

Note: When lightning strikes, the potential surge can be extraordinary. Very few surge protectors can protect against this type of electric current – the only **true protection** during a lightning storm is to **physically disconnect your computer and electronic devices** from the wall outlet.

What to look for when purchasing a surge protector

- 1) A unit that can absorb **at least 600 joules** of energy or more; the higher the joule rating the better.
- 2) The **clamping voltage** or **transient suppression voltage** should be either 330V or 400V.
- 3) Look for a unit that has an **indicator light** which indicates that the surge protection feature is working properly.
- 4) A **site wiring fault indicator** light is a plus if you live or work in an old building. This feature provides a quick way to find out if the wiring in your walls is grounded properly. If the ground wire in the wall outlet isn't working, no surge protection will help.