

## Good Surge Protection

Electrical sockets are supposed to provide a consistent voltage of electricity, and devices you plug into your power outlets depend on this. In some cases, a power spike can occur when the voltage suddenly increases. This can often be caused by lightning strikes, power outages, or malfunctions in the grid the power company is responsible for. A spike is a short increase in voltage, while a surge is one that lasts more than a few seconds. Surges are usually caused by problems with the electrical grid.

Whatever the cause, a sudden increase in current can damage electronics that are drawing power from the surging or spiking outlet. It could even render them completely inoperable, the increase in current having damaged them beyond repair.



*Florida's Frequent Storms Generate Surges!*

Standard electrical outlets don't have any protection against power surges and spikes. Surge protectors are generally made and sold in the form of power strips, although you can also buy single-outlet surge protectors that sit against the socket and provide a single, protected outlet. You can also pick up travel surge protectors, which are small, offer fewer outlets, and will fit in a laptop bag.

Surge protectors use a variety of different methods to do this, but they generally boil down to a system that diverts energy over the safe threshold to a protective component in the surge protector itself. The surge protector ensures that only the normal, safe amount of electricity passes through to your devices.

### **The Wizard says: Power Strips Aren't Necessarily Surge Protectors!**

Some people are confused about this and call every power bar a "surge protector," but this isn't



true. The cheapest power strips are often not surge protectors and only provide additional power outlets for you. When using a power strip for your expensive electronics, be sure its specifications say it has a surge protector. Below, you'll see a type of power bar that probably isn't a surge protector.

Remember, the cheapest surge protector from an obscure manufacturer may not provide much protection when it's actually needed. Reputable

companies that supply surge protectors, like Electrical Connections, will also offer warranties, promising to replace any electronics connected to the surge protector if a surge occurs and they become damaged.

And, don't forget...surge protectors don't last forever. The components they use to divert energy can wear down as a result of power surges. This means that your surge protector's life depends on how frequently power surges occur in your area. Here in South Florida, that happens a lot! A surge protector can only absorb a limited amount of additional power.

Some surge protectors have lights that go off (or on) to let you know when they can no longer provide any protection, while some of the more expensive surge protectors may even have an audible alarm that goes off to let you know of this. Keep an eye on your surge protector and replace it when the surge protector asks you to.

Surge protectors are easy to forget about when everything seems to be going fine, and they would be completely useless in a perfect world where the electrical system never malfunctioned. However, surge protectors are a fairly inexpensive and important way of protecting your expensive gadgets like computers, game consoles, and...yes, even your appliances that rely on printed circuit boards to operate.