

*3 M Stemwinder*  
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## **Home & Family Protecting Your Electronics from Lightning**

Summer thunderstorms can sneak up with little warning, and with those severe thunderstorms comes the possibility of lightning strikes. Protecting your home's electronics from destructive power disturbances can help ensure the safety of your electronic equipment and prevent the loss of important data.

The common element in both home and business electronics is power. In today's high-tech world, electricity runs our clocks, computers, printers, fax machines, copiers, lights, heating, air conditioning and a multitude of other items.

People spend countless hours, a great deal of money and enormous amounts of energy building their personal computer and electrical infrastructure. Downtime is costly for businesses, and individuals also have a lot to lose – such as all their important financial and personal data, as well as the functionality and future performance of their gadgets.

Bud VanSickle, executive director of the Lightning Protection Institute, a nationwide, nonprofit organization that promotes lightning protection education, awareness and safety, explained the destructive path that lightning can take.

“Lightning wants to get to ground by the easiest route available. If allowed to advance – with no control mechanism – through a structure, it may move from grounded system to grounded system ‘jumping’ or side-flashing through the building,” he said.

“Without the presence of a low resistance path as provided by a lightning protection system, lightning will travel via any conductive matter it finds along the way, including plumbing, low-voltage wires, gutters, irrigation systems, telephone lines and electrical systems,” VanSickle noted.

“When a structure is equipped with a lightning protection system, the destructive power of the lightning strike is directed safely into the ground, leaving the structure, people and building systems unharmed,” he added.

In addition to installing lightning protection, such as lightning rods, what other ways can individuals protect their electronic investments? “You can try to unplug everything, but so many electronic systems exist today that it is difficult to do,” VanSickle said. “Things like home security systems, garage or gate controls, and even thermostat controls may be hard-wired and impossible to

easily disconnect.” Also, if you are away from home during a storm, it is obviously impossible to disconnect your valuable electronics.

According to VanSickle, it’s important to make sure sensitive pieces of electronic equipment have reliable surge protectors. “A surge is an increase in electrical current due to a lightning strike on or near a power line or utility service,” he said. “Surge suppression is installed for all wired services [electrical panels] at the entrance of a structure in order to prevent the entrance of over-voltages, which can cause a fire.”

Don’t be fooled by cheap power strips. Make sure you’re using a quality surge protector that is rated for your intended use. Following are other steps to take:

- Turn off all lights and major appliances. This will help your local power company restore power more quickly while protecting your equipment from voltage fluctuations and circuit overloads when power returns.
- Besides having surge protectors, make sure your computers are protected with battery backup units. This not only protects against loss of data, it helps to prevent against system crashes.
- Finally, invest in data line surge protection as well. Although protection of data lines is often overlooked, know that dangerous power surges can travel through your telephone lines, cable/cable modem lines and DSL lines.