Cable Innovations
4737 Hwy 332 Suite 21
Hoschton,GA 30548
800-952-5146

Application Note

DWG#11070208 REV a

Subject: How to determine if a ground is adequate

Cable Innovations surge suppression products require adequate grounding in order to function at peak efficiency. This application note is intended to provide guidelines on how to determine whether the grounding is sufficient quality to maximize our products surge suppression capabilities.

If grounded to power service electrode grounding system

Check with an ohmmeter or multimeter.
Place one test lead on the cable connector outer connector (the threaded part). Place the other lead on the ground terminal on your electrical outlet.
The resistance between the two should be near zero ohms.

If no power service grounding or pole vertical present then use a ground rod. By code you must have a 8' ground rod driven into the ground. But just because you have a 8' ground rod that doesn't mean its enough. You must have 25 ohms or less to be considered properly grounded. This will all depend on the soil make up. Sandy soil is not as good as loam or clay. You may have to drive 16' or more to get under 25 ohms, doubling the length of ground rod reduces the resistance by 40%. You may sometimes even have to drive multiple rods ten feet apart from each other, and connected together to drop the resistance, or place rock salt around the ground rod to make the soil more conductive.

For questions or comments please contact:
Cable Innovations
Engineering Dept.
800-952-5146