

Apple Hardware: Importance of Proper Grounding (2/97)

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TOPIC -----

This article discusses the importance of proper grounding for all Apple equipment.

DISCUSSION ------

- From the standpoint of user safety, when using the equipment, it is important to have the accessible portions of the system at a voltage potential that do not endanger the user. Without a ground, the high voltages used to drive the monitor might build up a large enough potential to cause serious shock to a user.
- When systems are not grounded, there is the possibility that a system may build up a charge, either from environmental conditions or from the voltages inside. Without a ground path for this charge to dissipate, the system could self-destruct from a serious over-voltage condition.
- If a system is not properly grounded, any peripherals connected may or may not be grounded. This could cause excessive ground currents that might cause erratic operation. Excessive ground currents could also endanger the equipment. This is the primary reason for installing Ground Fault Interruption circuits at locations where excessive ground currents would be hazardous (places like bathrooms and kitchens where water and electricity are in close proximity).

If all systems in use at any particular location are properly grounded, there is minimal possibility of user shock, system overload, and/or erratic operation. Also, many governments require certain types of equipment to be grounded for all the above reasons, although the language in those regulations is much more specific.

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