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ME_374
Grounding the Arduino

Below are a few examples of how mis-grounding an Arduino can both harm your Arduino and prevent your system from completing its intended function.

1. Never ground anything that draws more than .5 Amps through your Arduino. The grounds on the Arduino should be used for signal acquisition and signal processing only.
2. Never ground anything that is higher than 5 Volts through your Arduino when your Arduino is being powered by the USB drive on your computer and 9 Volts when your Arduino is being powered by a 9 Volt battery.
3. Never link the ground pins through across the physical Arduino board. These ground pins can “meet up” at a separate ground location on a breadboard, but a wire should never directly connect just those two ground pins.
4. When using an analog input pin, use the ground pin on that side. This keeps your reference voltage relative to the signal your Arduino is processing.

