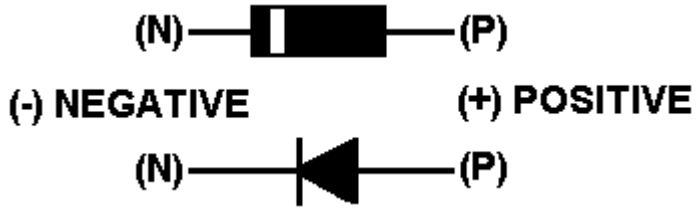
How a DIODE works…

A DIODE is an "Electron gate" allowing electrons to travel in only one direction. A diode will allow POSITIVE (+) voltage to travel from the ANODE (+) through to the CATHODE (-). It WILL NOT allow POSITIVE (+) voltage to travel from the CATHODE (-) to the ANODE (+).

***IMPORTANT REMINDER*: The BAND on a DIODE marks the CATHODE or NEGATIVE (-) side of the DIODE.**



When working with a NEGATIVE (-) signal, the DIODE works in reverse. A NEGATIVE signal will travel from the CATHODE (-) to the ANODE (+), BUT WILL NOT travel from the ANODE (+) to the CATHODE (-).

DOIDES ARE NECESSARY IN THE FOLLOWING COMMON APPLICATIONS:

1. **Connecting (2) two sets of SWITCH OUTPUTS (the switch outputs are the output wires or trigger wires from a shock sensor or a hood pin switch that triggers the alarm to sound) to the same TRIGGER INPUT wire (the trigger input wire is the MAJOR or MINOR NEGATIVE (-) input wires usually the GREEN and YELLOW wires on the alarm).**
2. **Sending (2) two different circuit control pulses while keeping them isolated from each other.**
3. **Preventing feedback through the windings of a relay coil.**

***IMPORTANT REMINDER:* the most common diode is part number 1N4001 to 1N4004 they are 1-amp general-purpose diodes, use the appropriate amperage rating.**