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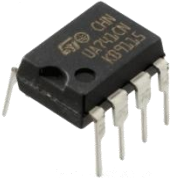


## Introduction To Analog Electronics – Lesson 4: Zener Diodes

### ANALOG PARTS

The following schematic material is meant to go with the online lesson found here:  
[http://www.pyroelectro.com/edu/analog/zener\\_diode/](http://www.pyroelectro.com/edu/analog/zener_diode/)

### PARTS USED IN THE EXPERIMENT

In this experiment we used 3 core components, we used the 741 to generate an AC sine wave output, then we used a Zener Diode to clip the AC sine wave on both the negative and positive sides and finally we used a stereo cable with clipped and tinned ends to see the AC signal on our laptop oscilloscope program.

Picture	Type	Description
	Thru -Hole 741 Op-Amp (Dip Package)	This is the standard LM741 Operational Amplifier. It comes in an 8 pin IC DIP package. <a href="#">Part Link</a>
	1N4733A +5.1V Zener Diode	This is the zener diode that we will use in all experiments for this lesson. It has a Zener 'knee' Voltage of +5.1v <a href="#">Part Link</a>
	Stereo Cable Cut w/ Tinned Leads	This stereo cable is cut off at one end so we have easy access to the wires inside and can use it as a probe. <a href="#">Part Link</a>

### ADDITIONAL INFORMATION

To ask questions about anything found in this schematic please head on over to the forums located at:  
<http://www.pyroelectro.com/forums/>