

WACL Electronics Course

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July 4, 2022

0.1 Power Conversion

0.1.1 Rectification

What is Rectification?

Rectification is the process of converting AC to DC, commonly used in power supplies, such as a phone or laptop charger. This is very important due to digital electronics requiring DC to function. Although repair/diagnosis of AC circuitry should not be undertaken without the necessary training, understanding of how AC circuits function is important for safety and to better understand the use of different components.

This circuit uses components which have already been discussed earlier in this document, so for further explanation refer back to the appropriate sections.

For this AC-DC conversion, the alternating current needs to be converted to flow in just one direction. Therefore a key component in this process is a diode (This will provide a [hyperlink to the diode section](#)). The most basic form of circuitry is a half-bridge (otherwise known as half-wave) rectifier. This uses a single diode in series with the load

