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## \* Amplifier →

An amplifier, electronic amplifier or (informally) amp is an electronic device that can increase the power of a signal (a time-varying voltage or current). It is a two-port electronic circuit that uses electric power from a power supply to increase the amplitude of a signal applied to its input terminals, producing a proportionally greater amplitude signal at its output.

terminals, producing a proportionally greater amplitude signal at its ~~input~~ output. The amount of amplification provided by an amplifier is measured by its gain: the ratio of output voltage, current, or power to input. An amplifier is a circuit that has a power gain greater than one.

An amplifier can either be a separate piece of equipment or an electrical circuit contained within another device. Amplification is fundamental to modern electronics, and amplifiers are widely

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used in almost all electronic equipment. Amplifiers can be categorized in different ways. One is by the frequency of the electronic signal being amplified.

for example - audio amplifier.

Amplify signals in the audio (sound) range of less than 20 kHz, RF amplifier amplify in the radio frequency range b/w 20 kHz and 300 kHz, and servo amplifier and instrumentation amplifiers may work with very low frequencies down to direct current.