

BASIC AMPLIFIER

Lecture-31

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AMPLIFIER

- An amplifier is an electronic device or circuit which is used to increase the magnitude of the signal applied to its input. Amplifier is the generic term used to describe a circuit which produces an increased version of its input signal.



FUNCTION OF AMPLIFIER

- As the name suggests, the purpose of an amplifier or an op amp is to amplify or increase the input signal to produce an output signal which is much larger than that of the input, with a similar waveform as that of the input. The main change in the output signal will be the increase in the power level.



Categories For Amplifier

- Voltage Amplifier
- Current Amplifier
- Power Amplifier



VOLTAGE AMPLIFIER

- These are most common amplifiers used in the electronic devices. These amplifiers increase the amplitude of the output voltage of the signal.



Current Amplifiers

- These amplifiers increases the amplitude of the input current compared to the input current waveform.



Power Amplifiers

- The purpose of the power amplifiers is to increase the power i.e. the product of output voltage and current is greater than the product of input voltage and current.
- Either the voltage or current at the output may be less than the input, the overall voltage or current product will be greater than the input. When an AC signal is applied to the amplifier, only a part of it is amplified.