The difference between power amplifier and voltage inverter

What is the difference between voltage and power amplifier?

The most significant difference between voltage and power amplifiers is that a voltage amplifier increases the magnitude of voltage of the input signal, while a power amplifier raises the power level of the input signal. An amplifier is an electronic circuit that is used to increase the strength of a signal in terms of voltage, current, power, etc.

What is a power amplifier?

A power amplifier is a device that is designed to boost the power level of the signal present at the input. Basically,to have large power at the output,a signal having a large magnitude of signal voltage must be present at the input. This is the reason generally a voltage amplifier is present before a power amplifier.

How does a power amplifier work?

In actual practice,a voltage amplifier is placed before the power amplifier which increases the voltage level of the signal. This high voltage signal at the input of the power amplifier generates a high current signal,and the product of which provides a signal of high power at the output of power amplifier.

Do power amplifiers have high voltage and low voltage?

Power amplifiers use a relatively high input voltage of the order of a few volts. Voltage amplifiers have high voltage and low power output. High power and low voltage output are observed in Power amplifiers. The voltage amplifier circuit uses a transistor smaller in size. The circuit of a power amplifier has a relatively larger transistor.

What is the input voltage of a power amplifier?

The input voltage of a voltage amplifier is very low,of the order of approximately few mV. The input voltage of a power amplifier is relatively high of the order of few volts. Voltage amplifier has high voltage and low power output. Power amplifier has high power and low voltage output.

Can we obtain a power amplifier by replacing a transistor?

The noteworthy point is that we cannotobtain a power amplifier by simply replacing a transistor of low power dissipation in a voltage amplifier circuit by another transistor with high power dissipation. Let us consider a voltage divider biased common emitter voltage amplifier circuit,with replaced transistor,shown in Fig. 17.2.

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