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Subject: Fixed/cathode bias and AC

Posted by [Manualblock](#) on Tue, 19 Jul 2005 14:44:43 GMT

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Thanks all for doing a great job in explaining this. So fixed bias is derived from a voltage divider and a cap on the input AC signal. It has the advantage of allowing the tube to be operated at a fixed  $V_g$ . Self-bias uses a resistor to react to changes in the signal by following Ohm's law and causing a plate voltage drop to change with the  $V_g$ . The self-bias is self regulating and must operate in class A. It is easier to design due to the self-regulating properties of the circuit. AC component on the plate voltage is removed by the by-pass cap. Now why would anyone go to the trouble of using grid leak bias when they could just use the cathode bias? It seems so simple.

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