Subject: Protection devices
Posted by Wayne Parham on Tue, 07 Jan 2003 02:18:57 GMT
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Using light bulbs is a common method of power protection for tweeters, and it works pretty well. I've used various methods over the years, including fast-blow fuses, light bulbs and surge clamping diodes. Each of them work very well when properly implemented.The important thing with fuses or light bulbs is to find one that will increae resistance or open before the voice coil of the device you intend to protect overheats. And with surge clamping diodes, you want a device that will clamp below the voltage where current is excessive in the voice coil. In this case, you also need an amplifier that is capable of short-circuit protection because when the surge clamping diode fails, it will present a short circuit to the amplifier. So the amp must crowbar itself or it will be damaged by the speaker protection circuit.None of these devices are expensive at all, so being on a budget is not really an issue. In fact, the way to save money here is to spend some money. You'll want to make sure and test your protection device with a destructive test - Blow a couple on purpose and find out where they blow. Make sure it blows before the protected device does.