



# Tips & Techniques

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## EXTENDING TUBE LIFE

If you have a TV or radio receiver that uses a filament string, you can easily avoid tube failures due to current surges that occur when line power is first applied. The non-linear resistors (dubbed "lamp misers" that are sold to extend the life of incandescent lamps can be used for this purpose. These devices are inexpensive (about \$1 each), have a cold resistance of about 150 ohms, a "hot" resistance of about 2 ohms and a load capacity of about 300 watts. Drop one of the resistors into a wall outlet-to-bulb socket adapter, and then screw in a bulb socket-to-power outlet adapter. Plug the assembly into the wall, and the receiver into this device. The surge protector stabilizes to about a 2-volt drop in about 20 seconds. It runs hot (about 2 watts dissipation), but this heat is not critical —*Bertram*