

How do I prevent my light dimmer from humming?

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Sometimes the dimmer hums and sometimes the light itself hums. What is happening and how can it be stopped? Not too long ago we had light dimmers that were simple rheostats. These would lower the voltage going to an ordinary light bulb and it would dim. No problems. But because we have developed so many different types of lights today, dimmers have gotten more complicated and the good old rheostat is hard to find. The modern electronic dimmers do not reduce the voltage that reaches the light bulb -- rather they turn the current on and off rapidly, reducing the total electricity that reaches the light. With a simple incandescent bulb, this can at times cause the filament to vibrate and you get that high pitched hum that comes out of the bulb. If you can find an old fashioned rheostat, you can stop the buzz. Otherwise you can try to reduce the wattage of the bulbs, which will change the frequency at which they vibrate. As life and lights get more complicated, it is important that you look carefully at the dimmers you buy to make sure they are appropriate for the type of light you want to dim. If you have a magnetic ballast for your lights, as is most often the case with recessed halogen lights (the electronic ballasts cannot take the heat up in the ceiling), then you need a dimmer for a magnetic ballast. If you have an electronic ballast, then you need a dimmer for that. There are also special dimmers for fluorescent lights. And no dimmer will act as a good speed control for a fan. There are special switches that look exactly like all the dimmers, but are actually speed control switches. Few companies make both the dimmer and the light -- so, often they are not optimally matched to operate together. Lutron Electronics is one company that makes both as balanced pairs and is worth checking out. If you could see inside the dimmers you would see an iron rod or ring with copper wires around it. This gadget serves as a damper or filter to the hum -- the larger the iron, the less humming you will hear. Of course you pay more for the larger cores and often you can only find the really good ones in commercial applications.

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