Power Line Filters

Here's some mfr data for a selection of power line filters I found at HSC. Some of these are very nice filters. For each filter, the first digit(s) is the current rating in amps. All are rated for 250 volts. The 1VB1 is quite compact, so it is a great solution for those nasty switching power supplies that are almost universally used for low voltage lighting. The 05DBAG5 is only slightly larger. The 20ESK6 would be great on the feed to your power amp. The 3EP1 and 03DRCW5 would be a good choice for noisy computer equipment. At HSC, these filters range in price from $1 - $15. They can be purchased through the usual industrial electronics distributors for $8 - $70.

[Graphs showing common mode and differential attenuation for various filters]
A selection of filters. The largest is a TriMag TPY45-4SF. Next largest (top right) is a Corcom 40VSK6. Bottom row, left to right: Corcom 20ESK6, Delta 10DKAS5, Corcom 3EP1, Delta 10DBAG5. The small filters with IEC jacks are Corcom 6EF1, 6EH4, and a discontinued Delta product.

A line filter housed in a standard electrical backbox can provide multiple filtered outlets for an office, home stereo rig, ham shack, or even Field Day. A few of the larger filters require a larger backbox. Note strain relief on cables entering backbox. Remember that for optimum suppression, the circuit common for the filter (nearly always bonded to the case of the filter) should have a very short bond to the shielding enclosure of the noise source, so this is not an optimum configuration. Even the least effective of these filters should be good for at least 20 dB on 160M, which is the difference between S9 and S4 on most S-meters.

To use these filters, plug them into an existing outlet and plug potentially noisy gear into them.