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Subject: Re: Unexpected upgrade

Posted by [gofar99](#) on Sat, 21 Sep 2024 02:41:29 GMT

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Hi I'm with Wayne on this. Ground loops of any kind nearly always cause problems. As Wayne mentioned often the only time you can actually see them is on a scope. I recently did a study of USB power sources. Both plug in and ones that actually replaced the outlet. Amazing. All put out some sort of noise. Some really bad some more reasonable. The best showed wide band noise at about -80dbv and assorted peaks at about -60dbv. The actual frequency of the peaks varied from brand to brand. Some at relatively low frequencies like 1-5KHZ and most in the 8-50KHZ range. One unit (plugtul) was horrible everywhere S/N (if you can call it that) was -55dbv across the board with a large peak at 4KHZ. Since many devices now use the USB as power (instead of the previous 6 and 12 VDC wall warts) this can be a major source of problems. For sensitive audio gear like phono preamps I really like to see numbers in the -90 to -100dbv range for the power side. Something that many folks seem to overlook is that in nearly all audio gear the power source is one half of the device and is the return path for the audio signal. If it is full of crud then there is no hope for having a good S/N in the output.

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