Subject: Breaking ground loop hum caused by satellite dish...
Posted by Mr Vinyl on Mon, 23 May 2005 14:57:30 GMT
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Hi,I am getting a ground loop hum from a recently installed satellite dish. Does anyone know how to break the ground on a satellite signal? Regular cable TV isolators do not work with satellite signals. Any help would be appreciated.Thanks

Subject: Re: Breaking ground loop hum caused by satellite dish...
Posted by Wayne Parham on Mon, 23 May 2005 15:39:43 GMT
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If you're connecting using RF, use a 75 ohm to 300 ohm transformer. If you don't have a 300 ohm input, put two of 'em back to back.

Subject: Re: Breaking ground loop hum caused by satellite dish...
Posted by Mr Vinyl on Mon, 23 May 2005 19:55:02 GMT
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Hi Wayne,Unfortunately putting two transformers back to back doesn't work with a satellite signal. At least it doesn't work with mine. It breaks the connection completely and I get no picture at all. Thanks for your response it is appreciated.Mr Vinyl

Subject: Re: Breaking ground loop hum caused by satellite dish...
Posted by Wayne Parham on Mon, 23 May 2005 21:08:22 GMT
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The thing is, the dish itself is just an antenna with a coax feed. The installer probably connected the shield to earth ground at the most convenient point. The rest of your system is grounded through the AC wall socket and its earth ground is probably connected somewhere else, so there is a potential for a ground loop.The satellite dish tuner probably has S-Video and composite video outputs, but those will have a ground connection. But it probably also has an RF outputs that is modulated to a standard television broadcast frequency, like channel 3. That output can be isolated using RF transformers.If you can't isolate the system after the tuner, then you will have to solve the grounding problem another way. You might want to connect earth ground for the dish at the same point as earth ground connection of your AC outlets. If you're lucky, they come into the house fairly close to one another.

Subject: Re: Breaking ground loop hum caused by satellite dish...
Posted by Mr Vinyl on Tue, 24 May 2005 00:20:25 GMT
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Hi Wayne,Everything you say is correct. However using an RF transformer on the RF output doesn't break the ground loop for some reason. I am going to try your idea on grounding it to the same earth ground as the AC outlets. It's about thirty feet away. Hopefully this will work. Thanks again for your help and advice.

Subject: Re: Breaking ground loop hum caused by satellite dish...
Posted by Wayne Parham on Tue, 24 May 2005 02:55:37 GMT
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If using an RF transformer doesn't stop the hum then one of two things must be the case. Either you have another ground connection, possibly through RCA connectors, or the problem isn't caused by a ground loop.

Subject: I solved the problem...
Posted by Mr Vinyl on Fri, 27 May 2005 14:02:32 GMT
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I solved the problem using this device in between the dish ground and the house ground outside my house. See link.
http://www.comm-omni.com/polyweb/iga90.htm

Subject: Re: I solved the problem...
Posted by Wayne Parham on Fri, 27 May 2005 16:05:26 GMT
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Very good. And thanks for the link!