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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.

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