



## Ultra Fidelis Troubleshooting Tip Cable Television Induced “Ground Loops”

At Ultra Fidelis, we do everything we know how to do to deliver a “better audio & home theater experience” and our objective is to provide entertainment systems that consistently perform at their peak. Unfortunately, there are some elements of this experience that are largely beyond our control and this bulletin addresses one of those elements: the cable television ground loop. We hope you won’t have the misfortune of experiencing this phenomenon first hand, but forewarned is forearmed.

All cable television companies are required, by the municipalities that grant their operating franchises to properly ground their systems. In simple terms this means that any extraneous electricity must be routed away from the signal before it enters the subscriber’s home. This is not a difficult feat to accomplish, but when the subscriber connections are not properly grounded, the result can cause some very bothersome side effects in audio and theater systems. These side effects often do not appear until after a properly grounded plasma panel, LCD display, projector, or sound system has been installed in the home. The most common manifestations of a poorly grounded cable system are rolling horizontal bars on the video display and/or a constant hum from the audio system. We are finding increasing evidence that this is a fairly widespread problem and that the average cable television technician has neither the training nor the instruments to properly diagnose and correct the problem.

When the symptoms described above are observed, it is pretty easy to ascertain whether or not the cable television system is the culprit: simply disconnect the cable box(es) from the rest of the system. (This is as easy as unscrewing any and all cable TV connections in the room with the problem from the wall jacks.) If the symptoms disappear, the source of the trouble is obvious. We realize that dealing with some cable operators can be a frustrating test of patience, but unfortunately this problem is best addressed at its source and is usually easily remedied once responsibility is accepted. Ultra Fidelis can advocate on our customers’ behalf, or take measures to mitigate the problem when the cable company just won’t respond, but these additional services do involve some additional expense.