

VON YORK



Thank you for your purchase of Buzz Bgone. This Audio isolation transformer was designed to solve the common audio problems of hum, buzz, noise of unbalanced lines. THIS IS NOT A FILTER FOR “MAKING YOUR RIG QUIET” it is designed to help with electrical backfeed and circuit isolation.

These problems usually exist at the output of an electronic device that is connected to another electronic device in such a way as to create a ground loop where common mode or EMI current can flow. See Figure #1

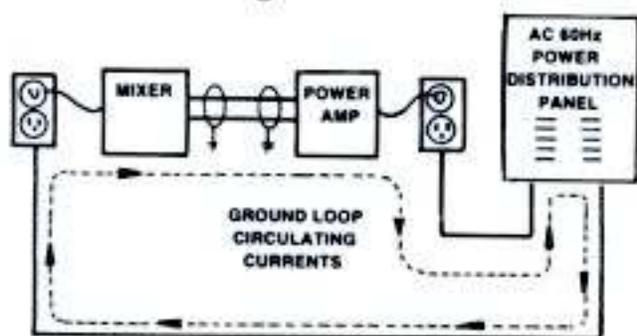


Figure #1

Hum in audio or video systems is usually the result of a *ground loop in the system* like the one shown in Figure #1. Common mode current will flow in a ground loop created by an electrical system that has grounds at *different voltage potentials*. The result is 60 Hertz hum in the power amp output.

*****This is not a noise filter or gate of any kind!*****

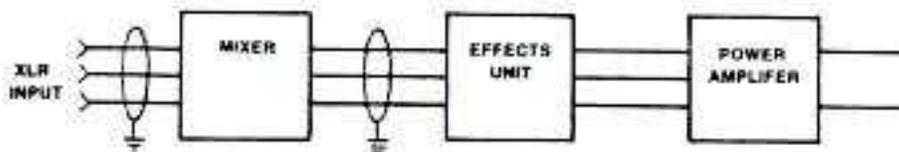


Figure #2

In a multiple device system shown in Figure #2, it is very important to determine which two pieces of equipment are the ones creating the problem.

An isolation transformer can be inserted between them to eliminate the hum. See Figure #3.

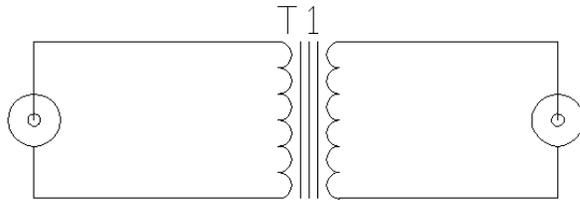


Figure #3. Isolation for unbalanced lines Audio isolator schematic

The transformer to be used in the circuit is 10K:10K ohm audio transformer which can handle the signal levels you are about to transfer through the isolator without causing too much distortion or other problems (not very low signal level microphone transformer for line signals etc.).

This transformer which is used has very flat frequency response over the whole audio frequency range (20Hz..20kHz) This kind of isolation transformer circuit should be best connected on the receiving end (equipment input) end of the cable to get best performance. If the cable is not very long (not many meters), in practice it does not matter to which end of the cable this transformer isolation circuit is connected.

