For Professional Audio Applications

Features

Easy to Use
True Isolation Transformer
Distortion-Free
Low Signal Loss
Excellent Signal Fidelity
Ten Times Audio Bandwidth
Passive Device
Ground Lifter Switch on 600 Models
Shielded Transformer Core
1:1 Turns Ratio

90-6301 ALLEN AVIONICS AGL-600 AUDIO GROUND LOOP ISOLATION TRANSFORMER 600 ohms
90-6302 ALLEN AVIONICS AGL-600-2 AUDIO GROUND LOOP ISOLATION TRANSFORMER 600 ohms, dual channel
90-6303 ALLEN AVIONICS AGL-10K AUDIO GROUND LOOP ISOLATION TRANSFORMER 10k ohms

Specifications

Part No.	Impedance	Bandwidth	Isolation	Insertion Loss	Isolation Between Channels (typical)	Package	Input Connector	Output Connector	Dimensions H x W x D
AGL-10K	10 K Ohms Input & Output	300 KHz	100 Meg ohms, minimum	Less than 0.5dB	N/A	Hi-Impact ABS Plastic	1/4" Jack	1/4" Jack	3 3/4" x 2 5/8" x 1 1/2" 95 x 67 x 38mm
AGL-600	600 Ohms Input & Output						3 Pin XLRF	3 Pin XLRM	
AGL-600-2					100 dB, minimum		3 Pin XLRF & 1/4" Jack	3 Pin XLRM & 1/4" Jack	5 3/8" x 4" x 2" 136.5 x 102 x 51mm

Ground Loop Isolation Transformers for Professional Audio Applications

All transformers in the AGL series are true isolation transformers, designed for low distortion, linear phase response and excellent pulse fidelity. This is accomplished by extending the bandwidth to over 300 KHz (10 - 15 times the normal 20 KHz bandwidth). The extended bandwidth guarantees a linear phase response that provides distortion-free audio with no loss of its original harmonic content. The AGL-600 and AGL-600-2 includes a ground lift switch for the XLR connectors.

ALLEN AVIONICS, INC.

The AGL series of audio isolation transformers was designed to solve the common audio problems of hum, buzz, noise and unbalanced lines. 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

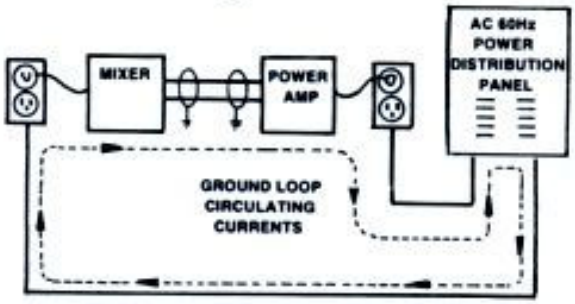

Figure 1

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.

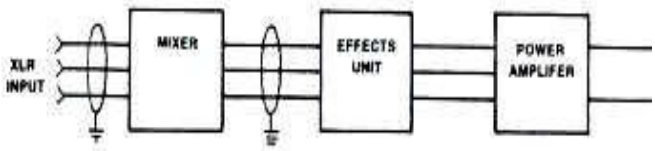

Figure 2

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. The AGL-600 or AGL-600-2 can be inserted between them to eliminate the hum. See Figure 3.

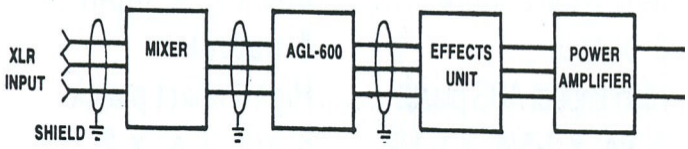

Figure 3

When the audio system is operating and hum exists, disconnect one piece of the equipment at a time until the hum stops. Once you find the combination of equipment that creates the hum, you can install the AGL-600 or AGL-600-2 isolation transformer between them.

Audio Isolation Transformer with High Common Mode Rejection

Switch Position (1)
Chassis shield connected.
Audio ground not connected.
Acts as a balanced line transformer to break ground loops. Eliminates hum and buzz.

Switch Position (2)
Chassis shield and audio ground connected.
Corrects balance on audio lines.

Switch Position (3)
Chassis shield and audio ground not connected.
Breaks ground loops. Provides audio isolation.

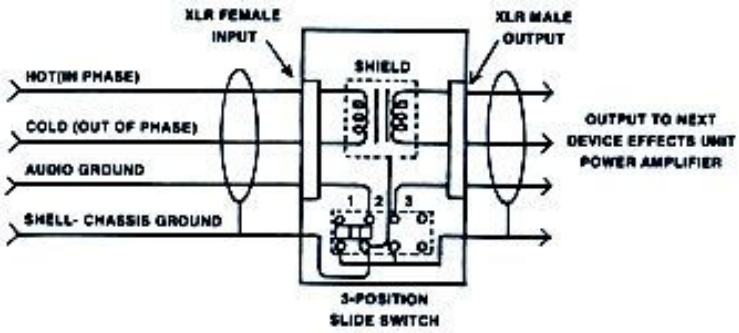

Figure 4

The AGL-600 or AGL-600-2 will stop hum, buzz and line balance problems. The 3-position switch will eliminate the need to cut pin "1" to lift the audio ground and the connection to the shield.

For audio systems using 1/4" mono jacks and plugs, use the AGL-10K (adaptors are available to RCA and 3.5mm audio connectors). See Figure 5

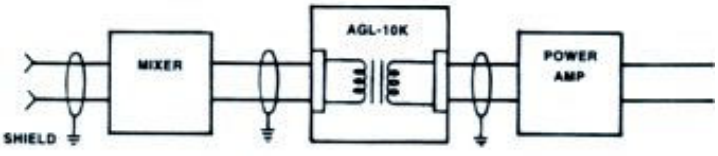

Figure 5