

Transformer Coupling Audio Inputs & Outputs

We sometimes receive calls from customers with audio connection problems with our equipment. These problems may be hum or buzz present in audio feeds, or surges from lightning or other sources damaging audio inputs or outputs. Almost universally, the solution is to install a transformer in-line with the audio feed.

Most audio input and output ports on Comrex gear is actively balanced, which simply means we use op amps on the inputs and outputs. These connections have some advantages:

- They are less expensive (therefore, so are our products)
- They are smaller
- They provide good performance with other balanced devices and short cable runs.

There are also some disadvantages:

- They can be damaged (although not easily)
- They may not interface well to consumer (unbalanced) ports
- They have limited Common Mode Rejection (They can pick up Hum and Buzz)
- They pass any DC offset into the audio path

Some audio engineers install transformers between devices as a matter of routine to make their connections trouble free. Usually, though, problems must occur before the expense is justified.

So what transformer to use? One that we recommend is the Model IL-19. This transformer is built into a barrel with XLR inputs and outputs (it can mount directly on the Comrex audio connector.) Primary and Secondary grounds are tied to independent electrostatic shields.

It is available from:

Sescom, Inc

2100 Ward Dr

Henderson NV 89015-4249

Orders: 1-800-634-3457

702-565-3400

Tech help:702-565-3993

The current list price is \$45.00. Sescom takes major credit cards and can ship overnight.

