#### Clean Box II

# **Ground Loop Eliminator**

## The facts about Ground Loops:

Frequently hum in an audio system is caused by loop effects, which act like antennas. These loops can easily pick up 60 Hz (or higher harmonics) hum transmitted by electrical wiring. The loops are typically connected via grounds, thus commonly called ground loops. The safest way to eliminate ground loops is with the Clean Box II. This transparent device easily and safely removes ground loops without any signal degradation

# Examples of ground loops:

- The power ground of a synthesizer, connected to the signal ground of the synth, into a mixer's ground, then into a mixer's power ground.
- The signal ground of a send effect (reverb, delay) into a mixer, and the connecting power grounds of the mixer and the unit.
- The power ground of a guitar amplifier, connected to a signal processor which has a second guitar amplifier on the other channel, and then the second guitar amp's power ground.

### **Specifications:**

- Frequency Response: 10Hz 50kHz, +/- .5dB @ +4dBu
- THD:
  - .01% Typical @ 1kHz, +18dBu
  - <.05% @ 100Hz, +24 dBu
- Insertion Loss:
  - .4dB @ 100kOhm Load
  - 5.5dB @ 600Ohm Load
- Connections: ¼" TRS balanced/unbalanced jacks.
- Power Requirements: None. (Passive).

#### Usage:

- Minimize setup to one piece of equipment
- Carefully add pieces of equipment, listening for any hum.
- Once a piece of equipment is found to cause a ground loop disconnect from the system.
- Experiment with placing Clean Box II before or after offending unit to remove hum from system.
- NOTE: Never place a Clean Box II on the output of a power amplifier, you could seriously damage the equipment