



# RHODES 4-PIN CABLE ADDRESSING POTENTIAL - GROUND LOOPS

The drain wire in a Rhodes 4-Pin cable has the potential to cause a ground loop between the preamplifier (housed in the piano) and the suitcase amplifier.

It is often useful to try lifting the drain wire from the DIN connector on one side of the cable in order to mitigate potential ground loop hum.

In some instances, lifting the drain at the right angle connector will be quite effective and in others, lifting the drain at the straight connector will be effective. Unfortunately, there is no telling before trying it with a specific piano and suitcase. There will, of course, also be instances where having the drain connected at both ends isn't an issue, in fact, it can even result in better performance.

Only experimentation will tell what arrangement yields the best result in each scenario.

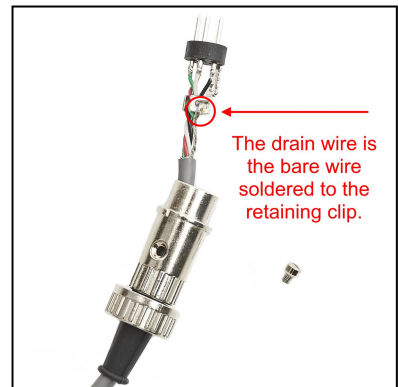
In no instance, however, would it be advisable to lift the drain wire from both ends of the cable as this would eliminate the benefit of the shielding.

**Disassembly and modification of a cable voids any and all warranty  
Incorrect and improper modification can cause damage to equipment beyond the cable  
All disassembly and modification are done at one's own risk**

## Instruction:

1. Select an end to first try (we recommend the right angle side) and remove the screw holding the connector assembly together.
2. Locate the drain wire
3. Temporarily desolder the wire from its termination point
4. Test the cable.  
\*Ensure that while you are testing, the drain wire doesn't make contact with any of DIN pins or the retention bracket. Also, ensure that the connector at the opposite end of the cable is fully assembled and has the drain connected.
5. Repeat test as necessary on the opposite end of the cable
6. Select best arrangement and reassemble cable.  
If the drain will be lifted on one side, ensure it cannot make contact with any pins, the retaining bracket or the shell of the connector. Either clip it out entirely, or sufficiently cover the wire with heatshrink.

## STRAIGHT CONNECTOR:



## RIGHT ANGLE CONNECTOR: \*In order to ensure proper orientation of the right angle connector, take adequate note of its assembly before taking it apart.

