

Some wireless in-ear monitor systems can exhibit a problem with noise. This is in part due to the design of the RF input section. There is a simple solution.

Sennheiser EW-300 IEM

For the Sennheiser EW-300 IEM (the first generation of the product), follow the instructions below. Adding two capacitors to the cable connecting the outputs of your Aviom device to the inputs of the Sennheiser wireless transmitter will eliminate the noise.

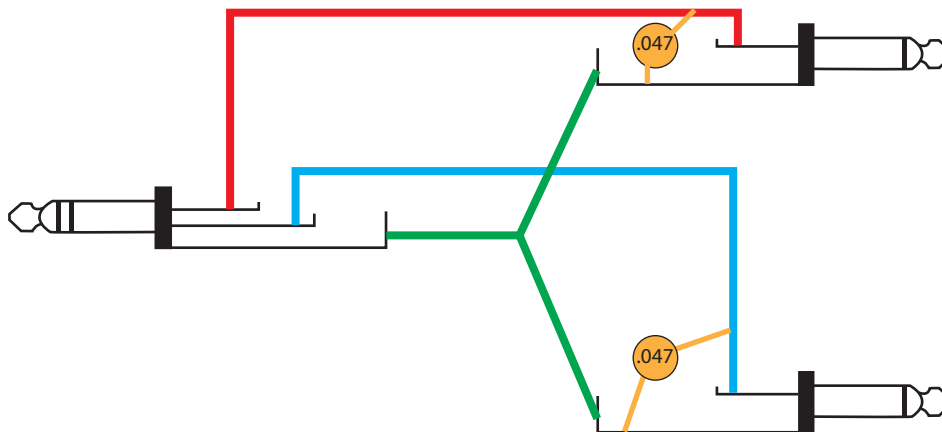
We have used the following:

- Radio Shack part number 272-1068 Polyester Film Capacitors
- Radio Shack part number 272-134 Ceramic Disc Capacitors

These are 0.047uF, 50VDC capacitors.

The EW-300 has a stereo input on its transmitter. Typically you will use a cable with a TRS plug on one side, connected to your Aviom A-16 Personal Mixer's stereo output, that splits to two separate mono cables. These mono cable feed the Left and Right audio inputs on the Sennheiser transmitter. This is the same type of cable used to connect an audio processor to a mixing board, sometimes called an "insert cable".

To make the adapter cable you need to add a capacitor to each of the mono plugs used for the input signal. The capacitor is connected between the ground and hot signals on each. See the diagram below.



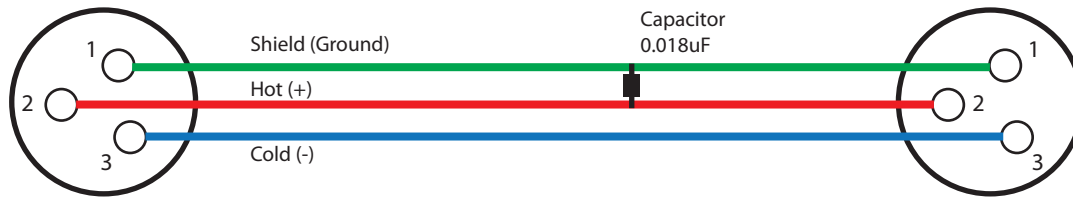
On the left side is the stereo output of your Aviom A-16 Personal Mixer. It is split into two separate signals (left and right). The right side of the diagram shows the two outputs from the Aviom mixer ready to be plugged into the Sennheiser transmitter Left and Right inputs with the modification. The capacitors are soldered between the ground and hot signals of each plug.

Sennheiser EW-300 G2 IEM

For the Sennheiser EW-300-G2 IEM (the second generation of wireless product from Sennheiser), a different fix is required. The inputs on the EW-300-G2 transmitters use XLR connections.

When using the Aviom A-16R rack-mounted Personal Mixer:

Adding a .018uF, 50VDC capacitor to each cable connecting the XLR outputs of your Aviom A-16R to the XLR inputs of the Sennheiser wireless transmitter will eliminate the noise. Follow the diagram below:



To make the adapter cable you need to add a capacitor to each of the mono plugs used for the input signal.

When using the Aviom A-16II Personal Mixer:

Adding two capacitors, 0.047uF, 50VDC and two resistors, 100 Ohm, 0.5 Watt to the cable connecting the outputs of your Aviom A-16II to the inputs of the Sennheiser wireless transmitter will eliminate the noise.

Typically you will use a cable with a TRS plug on one side, connected to your Aviom mixer's stereo output, that splits to two XLR cables. These mono cables feed the Left and Right audio inputs on the Sennheiser transmitter.

To make the adapter cable you need to add a capacitor and a resistor to each of the mono plugs used for the input signal.

