**Line level signal to microphone input adapter**

Sometimes there is need to convert the line level signals to a signal level that can be connected to your microphone input. Because the line level signals are typically in the range of 0.5 to 2 VAC and the microphone signals are in the .00245 VAC or millivolt range. You will need to attenuate the line level signal to match the microphone level. This means that typically you will need 40 to 50 dB of attenuation to accomplish this.

**50 db PAD**

Professional audio Line level output from your microphone processor is typically +4db. The audio consoles Microphone input is at –50db. To match the audio level use the resistor attenuator shown below.

![Resistor Attenuator Diagram](https://via.placeholder.com/150)

The 3 resistors used above are 1/4 to 1/8 watt metal film at 1% precision.

The circuit is small enough to fit inside your XLR connector housing. If the input to your audio console is a Molex or AMP connector then connect the resistors at that point. If it is necessary you may increase the attenuation level by increasing, the 47K ohm resistor value to 100K ohm or higher. Of course, the opposite is true to lower the attenuation level.

**XLR pinouts**

Plus Hot pin 2, Minus Low pin 3, Ground pin 1

One additional note some line level equipment may have a small DC voltage on there outputs. You will need to block this DC voltage from getting into your microphone inputs. Otherwise, you may hear a hiss noise or cause the microphone input to distort your audio or worst case destroy the input IC.

From the line level output, connect capacitors in series.

(+) Hot Output (Blocking Capacitor) to the High 47K Ω Resistor
(-) Low Output (Blocking Capacitor) to the Low 47K Ω Resistor

The capacitors used should be electrolytic type 47MFD at 20 VAC the + lead should go towards the Line level XLR connector.