

### **“Why Can’t I Use a Littlite in my Phantom Powered Mic Input?”**

Phantom power is supplied to microphones over the microphone's audio cable. In the old days, capacitor microphones had tube amplifiers in the microphone to amplify the small high impedance signal. The standard for phantom power is +48 volts applied to BOTH sides of the audio signal pair through two resistors, with the V- connected to ground and shield. The voltage is too high for efficiently driving LED's, and the available current, limited by the series resistors, is a maximum of 2 to 10 mA, depending on the console design. (That is a maximum of about a tenth of a watt available.)

It is possible that that a lamp with a bunch of LED's in series, like maybe 8, could be powered from the phantom supply, but the other detail is that any disturbance to the phantom supply could cause noise in sensitive audio inputs, which, as they say, would be bad.

And few folks would be willing to give up a mic input to plug in a work light.