

WHY DO MIXER CONTROLS HAVE SUCH WEIRD NAMES? (part 3, phantom power) By Bruce Bartlett



For example, "phantom power". Condenser mics need power to operate their internal electronics. That power can come from an internal battery, or an external voltage source such as a mixer, mic preamp, phantom power supply or audio interface.

Phantom power is supplied along the mic cable. It's not on a separate wire; it's "hiding" in the mic cable along with the mic's signal - hence the name.

Phantom power is 12 to 48 volts DC on XLR pins 2 and 3 with respect to pin 1. It is supplied only from a female XLR connector. If a mic gets power from anything else, such as a wireless transmitter, that power is called "DC bias"; it's not actually phantom power.

Look for a switch on your mixer or amp labeled "phantom", "P48", or "48V". After you plug in a mic, press the phantom power switch. Check your product's manual to make sure that phantom power is applied to the mic channel that you are plugged into.

If you are connecting a Bartlett microphone to a mixer or instrument amp that lacks built-in phantom power, then you need to purchase a phantom power supply (about \$30-\$40). Using a standard mic cable, connect the supply between the mic and the mixer or amp.

The Bartlett Guitar Mic B is battery powered so it doesn't need phantom power. Some direct boxes and preamps are powered BY phantom power, but they do not supply phantom power TO a microphone.

[Photo: Yamaha MG series]